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=> d his _
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L1
          1667 S SASAKI A?/AU
L2
L3
          879 S KAWANO K?/AU
L4
          1166 S OKABE T?/AU
            96 S KITAZAWA N?/AU
         14232 S TAKAHASHI K?/AU
L6
            0 S YAMAOTO N?/AU
L7
         12859 S SUZUKI Y?/AU
1.8
L9
           660 S MATSUNAGA M?/AU
L10
           392 S KUBOTA A?/AU
                                                        inventor search
L11
         34556 S L1-10
L12
            1 S L11 AND CONDENSED PYRIDINE
           309 S L11 AND PYRIDINE
L13
L14
            57 S L11 AND PYRIDINE/TI
L15
            13 S L14 AND PATENT/DT
              SELECT RN L15 1
    FILE 'REGISTRY' ENTERED AT 15:58:48 ON 05 AUG 2001
L16
           38 S E1-38
    FILE 'HCAPLUS' ENTERED AT 15:59:10 ON 05 AUG 2001
            1 S L15 AND L16
L17
                             Icites w/ 38 compounds displayed
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L18
             STR
            50 S L18
L19
          1960 S L18 FUL parent search
L20
              SAVE L20 PAT850P/A
L21
              STR L18
           50 S L21 SSS SAM SUB=L20
          826 S L21 SSS FUL SUB=L20 8 2 6 gp ds in Subset search
              SAVE L23 PAT850S1/A
           15 S L16 AND L23 15 cpds from L23 are in appl. work (L17)
L24
    FILE 'HCAPLUS' ENTERED AT 16:12:54 ON 05 AUG 2001
L25
            2 S L24
            1 S L25 NOT L17 / cite w/ appl. compounds
L26
L27
           44 S L23
           42 S L27 NOT L25
L28
L29
           40 S L28 AND PY<1999
          35 S L29 AND PY<1998 35 C ites w/ PY <1998
7 S L28 NOT L30 — 1 cite is a patent with an entir
privity date
L30
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VAR G1=CH/N
NODE ATTRIBUTES:
NSPEC IS RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

L21

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 11

NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L20 1960 SEA FILE=REGISTRY SSS FUL L18

STR

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subset searce

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VAR G3=CY/14/17/20/22
NODE ATTRIBUTES:
NSPEC IS RC AT 11
CONNECT IS E1 RC AT 20
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN AT 18
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

L23 826 SEA FILE=REGISTRY SUB=L20 SSS FUL L21 L27 44 SEA FILE=HCAPLUS ABB=ON PLU=ON L23

=> d bib abs hitstr

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS

2000:277851 HCAPLUS AN

DN 132:313677

Analgesics containing 1-(1-phenethylpiperidin-4-yl)indole, ΤI 1-(piperazin-1-yl)-3-phenylisoquinoline, or 4-(piperazin-1-yl)-6phenylthieno[3,2-c]pyridine derivatives

Ueno, Kohshi; Sasaki, Atsushi; Kitazawa, Noritaka; Kawano, Koki; Okabe, Tadashi;

Takahashi, Keiko; Matsunaga, Manabu; Shinoda, Yukie Eisai Co., Ltd., Japan

PΑ

PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. PΙ WO 2000023075 Α1 20000427 WO 1999-JP5761 19991019

W: CA, CN, KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

JP 1999-296106

19991019

JP 2000191533 A2 20000711 PRAI JP 1998-296681 19981019 Α

MARPAT 132:313677 OS

GI

Novel analgesics for various diseases such as headache and migraine and pain and ache in assocn. with trauma, phys. compression, etc. are described. These analgesics, which are useful for the prevention, treatment, or improvement of pains in humans, contain as the active ingredient benzene derivs. represented by general formula (I or II) or pharmacol. acceptable salts thereof (wherein R2, R3 = H, halo, lower alkyl, lower alkoxy, cyano, lower hydroxyalkyl, lower hydroxyalkoxy, N-lower alkylamino, lower alkylsulfonylaminoalkyl; R4 = lower acylaminoalkyl, amido-lower alkyl, N-lower alkylamino-alkyl; n = 0, 1-3; R5 = lower alkyl, hydroxy-lower alkyl; the ring A represents a benzene or thiophene ring). I and II s.c. showed analgesic activity equal to or greater than that of morphine hydrochloride in acetic acid-induced

II

PATEL 09/852,850

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writhing assay in mice. They were also tested for the binding activity to serotonin (5HT) receptor as well as muscle relaxant activity.
     214611-53-7 214613-26-0 214613-27-1
     214613-33-9 214613-49-7 214613-83-9
     214613-84-0 214613-89-5 214613-90-8
     214618-14-1 223540-38-3 223540-56-5
     223540-84-9 223540-90-7 223541-70-6
     223542-28-7 223542-29-8 223546-94-9
     223546-95-0 223547-08-8 223547-11-3
     223547-20-4 223547-21-5 223547-40-8
     223547-42-0 223551-27-7 223551-30-2
     223557-26-4 265667-20-7 265667-21-8
     265667-22-9 265667-23-0 265667-24-1
     265667-25-2 265667-26-3 265667-27-4
     265667-28-5 265667-35-4
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL '(Biological study); USES (Uses)
        (analgesics contg. 1-(1-phenethylpiperidin-4-yl)indole,
        1-(piperazin-1-yl)-3-phenylisoquinoline, or 4-(piperazin-1-yl)-6-
        phenylthieno[3,2-c]pyridine derivs.)
RN
     214611-53-7 HCAPLUS
CN
     Acetamide, N-[[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-
     1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME)
                                CH_2-CH_2
RN
```

214613-26-0 HCAPLUS

 $1 \\ \\ \text{H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N-(2-fluorophenyl)ethyl]-1 \\ \\ \text{H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N-(2-fluorophenyl)ethyllarentyllarentyllare$ CN hydroxyethyl) - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ \text{HO-} \, \text{CH}_2 - \text{CH}_2 - \text{NH-} \, \text{C--} \, \text{CH}_2 \\ \end{array}$$

RN 214613-27-1 HCAPLUS

CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N,Ndimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{Me}_{2}\text{N}-\text{C}-\text{CH}_{2} \end{array}$$

RN 214613-33-9 HCAPLUS

1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-(9CI) (CA INDEX NAME)

$$0 \\ H_2N-C-CH_2$$

$$N-CH_2-CH_2$$

$$F$$

RN214613-49-7 HCAPLUS

1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N-CN methyl- (9CI) (CA INDEX NAME)

RN

214613-83-9 HCAPLUS
1H-Indole-6-acetamide, N-ethyl-1-[1-[2-(2-fluorophenyl)ethyl]-4-CN piperidinyl) - (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{EtNH-C-CH}_2 \end{array}$$

RN 214613-84-0 HCAPLUS

CN 1H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-N-(2hydroxyethyl) - (9CI) (CA INDEX NAME)

RN214613-89-5 HCAPLUS

CN Acetamide, N-[[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-1H-indol-6yl]methyl] - (9CI) (CA INDEX NAME)

RN 214613-90-8 HCAPLUS

Acetamide, N-[[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6yl]methyl]- (9CI) (CA INDEX NAME)

RN 214618-14-1 HCAPLUS

CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N,Ndimethyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM

CRN 214613-27-1 CMF C25 H30 F N3 O

CM 2 CRN 144-62-7 CMF C2 H2 O4

RN 223540-38-3 HCAPLUS

CN Isoquinoline, 1-(4-ethyl-1-piperazinyl)-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 223540-56-5 HCAPLUS

CN Benzenemethanol, .alpha.-ethyl-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)

RN 223540-84-9 HCAPLUS

CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-methoxy-(9CI) (CA INDEX NAME)

RN 223540-90-7 HCAPLUS

CN Ethanol, 2-[4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenoxy]- (9CI)
 (CA INDEX NAME)

RN 223541-70-6 HCAPLUS
CN Benzamide, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-N-propyl- (9CI)
(CA INDEX NAME)

RN 223542-28-7 HCAPLUS
CN 1-Propanesulfonamide, N-[[2-chloro-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 223542-29-8 HCAPLUS
CN 1-Propanesulfonamide, N-[[2-chloro-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenyl]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ CH_2-NH-S-Pr-n \\ O \\ O \\ \end{array}$$

●2 HC1

RN 223546-94-9 HCAPLUS

CN Benzenemethanol, 4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]-.alpha.-methyl- (9CI) (CA INDEX NAME)

RN 223546-95-0 HCAPLUS

CN Benzenemethanol, 4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]-.alpha.-methyl-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 223546-94-9 CMF C21 H25 N3 O S

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN

223547-08-8 HCAPLUS
2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]- (9CI) (CA INDEX NAME) CN

RN 223547-11-3 HCAPLUS

2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]-, dihydrochloride (9CI) (CA INDEX NAME) CN

●2 HCl

RN

223547-20-4 HCAPLUS
2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]-2-methyl- (9CI) (CA INDEX NAME) CN

RN

223547-21-5 HCAPLUS 2-Propanol, 1-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6yl]phenoxy]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 223547-40-8 HCAPLUS

CN 1-Piperazineethanol, 4-[6-[4-(2-hydroxy-2-methylpropoxy)phenyl]thieno[3,2c]pyridin-4-yl]- (9CI) (CA INDEX NAME)

RN 223547-42-0 HCAPLUS

CN 1-Piperazineethanol, 4-[6-[4-(2-hydroxy-2-methylpropoxy)phenyl]thieno[3,2-c]pyridin-4-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 223551-27-7 HCAPLUS

CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-fluoro.alpha...alpha.-dimethyl- (9CI) (CA INDEX NAME)

223551-30-2 HCAPLUS RN

Benzenepropanol, 3-{1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl}- (9CI) (CA INDEX NAME)

RN

223557-26-4 HCAPLUS
Benzonitrile, 5-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME) CN

265667-20-7 HCAPLUS RN

Acetamide, N-[[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME) CN

265667-21-8 HCAPLUS RN

3-Pentanone, 1-[[[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6yl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,10) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0){10$$

RN 265667-22-9 HCAPLUS

 $1 \\ H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-N-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-1-[1-[2-(2-fluorophenyl)ethyl]-1-[1-[2-(2-fluorophenyl)ethyl]-1-[1-[2-(2-fluorophenyl)ethyl]-1-[1-[2-(2-fluorophenyl)ethyl]-1-[1-[2-(2-fluorophenyl)eth$ CN methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{MeNH-C-CH2} \end{array}$$

265667-23-0 HCAPLUS RN

CN 1H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-(9CI) (CA INDEX NAME)

$$\bigcap_{H_2N-C-CH_2} \bigcap_{N} \bigcap_{N-CH_2-CH_2} \bigcap_{F}$$

RN

265667-24-1 HCAPLUS
Benzamide, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-N-propyl-, CN monohydrochloride (9CI) (CA INDEX NAME)

HC1

265667-25-2 HCAPLUS RN

Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-fluoro-CN .alpha.,.alpha.-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN

265667-26-3 HCAPLUS
Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-methoxy-,
monohydrochloride (9CI) (CA INDEX NAME) CN

● HCl

265667-27-4 HCAPLUS RN

Benzonitrile, 5-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-(2-hydroxyethoxy)-, monohydrochloride (9CI) (CA INDEX NAME) CN

● HCl

RN 265667-28-5 HCAPLUS

Benzenepropanol, 3-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 265667-35-4 HCAPLUS

1H-Indole-6-acetamide, N-acetyl-1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} \text{O} \\ \text{AcNH-C-CH2} \\ \end{array}$$

RE.CNT 4

RE

- (1) Eisai Co Ltd; WO 9843956 Al 1998 HCAPLUS (2) Eisai Co Ltd; WO 9918077 Al 1999 HCAPLUS (3) Meiji Seika Kaisha Ltd; US 5631257 A 1997 HCAPLUS
- (4) Rhone-Poulenc Rorer S A; US 5563144 A 1996 HCAPLUS

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=> d bib abs hitstr 2
```

L31 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:521437 HCAPLUS

131:157754 DN

Preparation of naphthyridine IL-4 antagonists and G-CSF stimulators ΤI

IN Solomon, Daniel M.; Grace, Michael J.; Fine, Jay S.; Bober, Loretta A.; Sherlock, Margaret H.

PΑ Schering Corporation, USA

so

U.S., 57 pp. CODEN: USXXAM

DT Patent

English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 5939431	Α	19990817	US 1997-878860	19970619
PRAI	US 1996-22173		19960620		

os MARPAT 131:157754

Title compds., e.g., R1Z1NHSO2Z(NH)a(CO)bR8 (R1 = 3-methyl-2-pyridinyl; Z1 AB = 1,7-naphthyridine-6,8-diyl)[I; R8 = alkyl(oxy) or benzyl(oxy); Z = phenylene; a,b = 0 or 1] were prepd. as IL-4 antagonists (no data) and G-CSF stimulators. Thus, 8-amino-6-(3-methyl-2-pyridinyl)-1,7naphthyridine was amidated by 4-(AcHN)C6H4SO2C1 to give I (R8 = Me, Z = 1,4-phenylene, a = b = 1). Data for G-CSF stimulating activity of I were given.

IT 200927-49-7P 200927-65-7P 200927-80-6P 200928-20-7P 200928-22-9P 200928-24-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of naphthyridine IL-4 antagonists and G-CSF stimulators)

200927-49-7 HCAPLUS RN

Acetamide, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]- (9CI) (CA INDEX NAME)

RN 200927-65-7 HCAPLUS

Glycine, N-[(4-aminophenyl)sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-_naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RN

200927-80-6 HCAPLUS
Acetamide, N-[4-[[methyl[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME) CN

RN 200928-20-7 HCAPLUS

1,7-Naphthyridine, 8-(1,2-dimethylhydrazino)-6-(3-methyl-2-pyridinyl)-(9CI) (CA INDEX NAME) CN

200928-22-9 HCAPLUS RN

CN 1,7-Naphthyridine, 8-(1-methylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) (CA INDEX NAME)

RN 200928-24-1 HCAPLUS Glycine, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RE.CNT 12

RE

- (2) Anon; GB 1545767 1979 HCAPLUS
- (5) Behrens; US 4942163 1990 HCAPLUS
- (6) De Zwart; J Med Chem 1988, V31, P716 HCAPLUS (7) De Zwart; J Med Chem 1989, V32, P487 HCAPLUS (8) Demetri; Blood 1991, V78, P2791 HCAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d bib abs hitstr 130 1-35
L30 ANSWER 1 OF 35 HCAPLUS COPYRIGHT 2001 ACS
     1998:25142 HCAPLUS
AN
     128:88786
DN
     Preparation of naphthyridines which affect IL-4 and G-CSF
ΤI
     Solomon, Daniel M.; Grace, Michael J.; Fine, Jay S.; Bober, Loretta A.;
     Sherlock, Margaret H.
     Schering Corp., USA
PCT Int. Appl., 98 pp.
PΑ
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                               APPLICATION NO. DATE
PΙ
     WO 9748368
                        A2
                               19971224
                                               WO 1997-US9202
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                             19980205
     WO 9748368
                         A3
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              NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU,
              AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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              GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
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                                               CA 1997-2258752 19970618 <--
     AU 9735673
                         A1
                               19980107
                                               AU 1997-35673
                                                                  19970618 <--
     EP 912571
                         Α2
                             19990506
                                               EP 1997-932142 19970618
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI, RO
     CN 1228090
                         Α
                               19990908
                                               CN 1997-197310 19970618
PRAI US 1996-669185
                               19960620
     WO 1997-US9202
                               19970618
os
     MARPAT 128:88786
GT
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- AB The title compds. [I; E = II, III, etc.; A = CH, S, N, N(O); L, M, X, Z, W, T, U, V = CH, N, N(O); Y = H, Me; Y1 = H, lower alkyl, Ph, etc.; Q = H, lower alkyl, lower alkyl O(O)CCH2, lower alkyl (O)C; a, b, c, g, h, j = O-1; f = 1-2; n = 1-6; tt = O-1; R8 = H, OH, halo, etc.] and their pharmaceutically acceptable salts, useful in the treatment of allergy, inflammation, autoimmune diseases, B-cell lymphomas, tumors, and the after effects of bone marrow transplantation, were prepd. Thus, reaction of 8-amino-6-(3-methyl-2-pyridyl)-1,7-naphthyridine with N-acetylsulfanilyl chloride in the presence of Et3N and DMAP in CH2C12 afforded the title compd. IV which resulted in a 4-5-fold increase in G-CSF levels, with an EC50 of 15 .mu.M.
- IT 200927-49-7P 200927-65-7P 200927-80-6P 200928-20-7P 200928-22-9P 200928-24-1P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (prepn. of naphthyridines which affect IL-4 and G-CSF) RN 200927-49-7 HCAPLUS
- CN Acetamide, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]- (9CI) (CA INDEX NAME)

RN 200927-65-7 HCAPLUS
CN Glycine, N-[(4-aminophenyl)sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 200927-80-6 HCAPLUS
CN Acetamide, N-[4-[[methyl[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 200928-20-7 HCAPLUS
CN 1,7-Naphthyridine, 8-(1,2-dimethylhydrazino)-6-(3-methyl-2-pyridinyl)(9CI) (CA INDEX NAME)

ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2001 ACS 1997:498744 HCAPLUS L30 AN Synthesis and antitumor activity of 3-arylisoquinoline derivatives Cho, -Won-Jea; _Yoo, Su-Jeong; Park, Myun-Ji; Chung, Byung-Ho; Lee, Chong-Cob DΝ ΤI ΑU College of Pharmacy, Chonnam National University, Kwangju, 500-757, S. cs Arch. Pharmacal Res. (1997), 20(3), 264-268 CODEN: APHRDQ; ISSN: 0253-6269 Pharmaceutical Society of Korea so PВ Journal

DT

GΙ

English

Phone: 305-4053 SEARCHED BY SUSAN HANLEY

Page 3

AB In order to study the structure-activity relationship of 7,8-dimethoxy-2-methyl-3-(4,5-methylenedioxy-2-vinylphenyl)isoquinoline-1(2H)-one (I), which has exhibited significant antitumor activity, chem. modifications of I were performed to yield the corresponding products, e.g., isoquinoline II. Further systematic uses of an efficient procedure for the synthesis of 3-arylisoquinoline derivs. produced the substituted compds. III (X = H, 4-Br, 4-MeO, 4-Cl, 2-, 3-, 4-Me), which were tested for in vitro antitumor activity against five different human cancer cell lines.

IT 194292-31-4P 194292-32-5P 194292-33-6P 194292-34-7P 194292-35-8P 194292-36-9P 194292-37-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and antitumor activity of arylisoquinoline derivs.)

RN 194292-31-4 HCAPLUS

CN Isoquinoline, 1-(4-methyl-1-piperazinyl)-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 194292-32-5 HCAPLUS

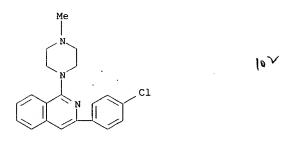
● HCl

194292-33-6 HCAPLUS RN

Isoquinoline, 3-(4-methoxyphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

194292-34-7 HCAPLUS
Isoquinoline, 3-(4-chlorophenyl)-1-(4-methyl-1-piperazinyl)-,
monohydrochloride (9CI) (CA INDEX NAME) RNCN



● HCl

RN

194292-35-8 HCAPLUS Isoquinoline, 3-(2-methylphenyl)-1-(4-methyl-1-piperazinyl)-, CN monohydrochloride (9CI) (CA INDEX NAME)

HCl

194292-36-9 HCAPLUS
Isoquinoline, 3-(3-methylphenyl)-1-(4-methyl-1-piperazinyl)-,
monohydrochloride (9CI) (CA INDEX NAME) RN CN

● HCl

194292-37-0 HCAPLUS Isoquinoline, 3-(4-methylphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

L30 ANSWER 3 OF 35 HCAPLUS COPYRIGHT 2001 ACS AN 1996:504767 HCAPLUS DN 125:275604

PATEL 09/852,850

DMSO-Ac20 promoted nitration of isoquinolines. One-step synthesis of ΤI 1-nitroisoquinolines under mild conditions AII Baik, Woonphil; Yun, Sangmin; Rhee, Jong Uk; Russell, Glen A. Dep. Chemistry, Myong Ji Univ., Kyung Ki Do, 449-728, S. Korea J. Chem. Soc., Perkin Trans. 1 (1996), (15), 1777-1779 CS SO CODEN: JCPRB4; ISSN: 0300-922X DT Journal English LA CASREACT 125:275604 OS GI

Nitroisoquinolines I (R = H, 5-NO2, 4-Br, 3-Me, 5-Me) were directly prepd. from the corresponding isoquinolines with potassium nitrite and acetic anhydride in DMSO in good yields.

IT 182184-82-3P RL: SPN (Synthetic preparation); PREP (Preparation) (nitration of isoquinolines promoted by potassium nitrite/DMSO/acetic anhydride) RN

182184-82-3 HCAPLUS Isoquinoline, 3-methyl-1-nitro- (9CI) (CA INDEX NAME) CN

L30 ANSWER 4 OF 35 HCAPLUS COPYRIGHT 2001 ACS 1996:451066 HCAPLUS

DN 125:161858

Selective inhibition of cyclic AMP-dependent protein kinase by TΙ isoquinoline derivatives

ΑU Lu, Zhe Xiong; Quazi, Nurul Huda; Deady, Leslie W.; Polya, Gideon M.

Sch. Biochem., La Trobe Univ., Victoria, 3083, Australia Biol. Chem. Hoppe-Seyler (1996), 377(6), 373-384 SO

CODEN: BCHSEI; ISSN: 0177-3593

DТ Journal

LA English

A large series of isoquinoline derivs. was synthesized including derivs. of isoquinoline, isoquinoline[3,4-c]furazan, 1,2-dihydro-1oxoisoquinoline, 6-oxopyrimido[1,2-b]isoquinoline, benzo[c][1,8]naphthyridine, pyrazino[2,3-c]isoquinoline and benzimidazo[2,1a]isoquinoline as well as further structurally related isoquinoline derivs. and pyrido-2,3-furazans. Representatives of all of these classes of isoquinolines are potent and selective inhibitors of the cAMP-dependent protein kinase (PKA) catalytic subunit (cAK) from rat liver. The most effective cAK inhibitors are a series of 1,3-di-substituted and 1,3,4-tri-substituted isoquinolines (IC50 values 30-50 nm) (compds. Al, A2, A3, A4 and A5) and 2-ethylcarboxy-3-amino-5,6-dihydro-6oxobenzo[c][1,8]naphthyridine (E1)(IC50 0.08.mu.m). Compds. A1-A5 inhibit CAK in a fashion that is competitive with respect to ATP as substrate. The isoquinoline inhibitors A1-A5 are ineffective or very poor inhibitors of wheat embryo Ca2+-dependent protein kinase (CDPK) and rat brain Ca2+-dependent protein kinase C (PKC), chicken gizzard myosin light chain kinase (MLCK) and potato tuber cyclic nucleotide-binding phosphatase (Pase). El is a moderately effective inhibitor of CDPK and PKC (IC50

PATEL 09/852,850

values 20 and 61 .mu.m, resp.). The bisisoquinoline-1(2H)-one compd. B7 inhibits cAK, CDPK, PKC and MLCK (IC50 values 8, 95, 24 and 7 .mu.m, resp.) as does J1 [2-(p-bromophenyl)pyrrolo[2,3-c]isoquinoline-5(4H)-one] (IC50 values 2, 50, 44 and 7 .mu.m, resp.). The very potent isoquinoline-derived cAK inhibitors found here involve substitution of the N-contg. isoquinoline ring system and these inhibitors show high specificity for cAK.

180507-73-7
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
 (selective inhibition of cAMP-dependent protein kinase, other kinases, and cyclic nucleotide-binding phosphatase by isoquinoline derivs.)

180507-73-7 HCAPLUS
4-Isoquinolinecarbonitrile, 1-[(4-cyano-3-methyl-1H-2-benzopyran-1-

ylidene)amino]-3-methyl- (9CI) (CA INDEX NAME)

IT

RN

RN

155999-40-9 HCAPLUS

ANSWER 5 OF 35 HCAPLUS COPYRIGHT 2001 ACS AN 1996:291499 HCAPLUS 125:57809 DN ΤI Electronic effects in isoquinoline systems Zielinski, Wojciech; Kudelko, Agnieszka; Mazik, Monika Institute of Organic Chemistry and Technology, Silesian Technical University, Gliwice, 44-101, Pol. Pol. J. Appl. Chem. (1995), 39(1), 33-38 SO CODEN: PJACE2; ISSN: 0867-8928 DTJournal LA English Values of pKa for 1-(N,N-dimethylamino)-3-methylisoquinoline and a series of their 6- and 7-substituted derivs., 3-methylisoquinoline and1-amino-3-methylisoquinoline were detd. in 50% vol./vol. aq.-methanolic soln. by the spectrophotometric method. The detd. values of pKa and values of pKa for 1-phenyl-3-methylisoquinolines and 1,3dimethylisoquinolines taken from literature were correlated with the Hammett .sigma. consts. Good correlations were obtained for 6-substituted derivs. with .sigma.p consts. and for 7-substituted derivs. with .sigma.m consts. The electronic effects occurring in the studied isoquinoline systems made by substituents present in pyridine and benzene ring are discussed basing on the detd. values. 155999-40-9 155999-41-0 155999-42-1 155999-43-2 155999-44-3 155999-45-4 155999-46-5 177978-22-2 RL: PRP (Properties); RCT (Reactant) (electronic effects in isoquinolines)

1-Isoquinolinamine, N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-41-0 HCAPLUS

CN 1-Isoquinolinamine, N,N,3,6-tetramethyl- (9CI) (CA INDEX NAME)

RN 155999-42-1 HCAPLUS

CN 1-Isoquinolinamine, N,N,3,7-tetramethyl- (9CI) (CA INDEX NAME)

RN 155999-43-2 HCAPLUS

CN 1-Isoquinolinamine, 6-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-44-3 HCAPLUS

CN 1-Isoquinolinamine, 7-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-45-4 HCAPLUS

CN 1-Isoquinolinamine, 6-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-46-5 HCAPLUS

CN 1-Isoquinolinamine, 7-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 177978-22-2 HCAPLUS

CN 1-Isoquinolinamine, 7-bromo-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

L30 ANSWER 6 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:869485 HCAPLUS

DN 123:343738

TI Perforated transfer printing media and printing process

IN Kawakami, Sota; Nakajima, Atsushi; Maejima, Katsumi; Komamura, Tawara

PA Konishiroku Photo Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 52 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

T Late	CIVI				
	PATENT NO.		DATE	APPLICATION NO.	DATE
ΡI	JP 07172059	A2	19950711	JP 1994-235470	19940929 <
DDAT	TD 1003-266507		10021025		

PRAI JP 1993-266507 OS MARPAT 123:343738

The title media, comprising a base sheet, a coloring layer of chelate color formable compd. mixed with binders (e.g., polyvinyl butyral), and color-barrier layer (e.g., gelatins mixed with IR absorbers), are forming perforation on the barrier layer by heat and/or pressure and transfer printing on a printing sheet (e.g., PET film coated with a soln. contg. polyvinyl butyral, metallic ion-contg. compd., KF-393, X-22-343).

IT 161581-19-7

 $RL: MOA \ (Modifier \ or \ additive \ use); TEM \ (Technical \ or \ engineered \ material \ use); USES \ (Uses)$

(chelate azo dyes; perforated transfer printing media and printing
process)

RN 161581-19-7 HCAPLUS

CN Benzoic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5nitro-, ethyl ester (9CI) (CA INDEX NAME)

L30 ANSWER 7 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:370786 HCAPLUS

DN 122:201322

TI Thermal-transfer recording material using chelating dye

IN Tanaka, Tatsuo; Kato, Katsunori; Komamura, Tawara

PA Konishiroku Photo Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 06312582 A2 19941108 JP 1993-102714 19930428 <-OS MARPAT 122:201322

GI

AB The material contains the dye I(R = substituent on benzene ring; n= 0-3; Rl= OH, amino) or II (Rl1 = substituent on benzene ring; Rl2 = substituent on isoquinoline ring; Rl3 = H, halo, monovalent substituent; G = chelatable group; p, q = 0-4)in the thermal-transfer layer. The thermal-transfer layer is contacted with a receptor layer, imagewise heated to form a chelating dye by the reaction of the dye with a metal ion to give images. The materials show good storage stability, and give high d. cyan images.

IT 161581-12-0 161581-13-1 161581-14-2

161581-19-7

RL: DEV (Device component use); USES (Uses)

(thermal-transfer recording material contg. chelating dye)

RN 161581-12-0 HCAPLUS

CN 4-Isoquinolinol, 1-[(5-chloro-2-hydroxy-3-nitrophenyl)azo]-3-methyl- (9CI) (CA INDEX NAME)

RN 161581-13-1 HCAPLUS

4-Isoquinolinol, 1-[[2-hydroxy-5-(methylsulfonyl)-3-nitrophenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

RN 161581-14-2 HCAPLUS

Benzonitrile, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro-(9CI) (CA INDEX NAME) CN

161581-19-7 HCAPLUS
Benzoic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro-, ethyl ester (9CI) (CA INDEX NAME)

L30 ANSWER 8 OF 35 HCAPLUS COPYRIGHT 2001 ACS

1995:339706 HCAPLUS ΑN

DN 122:174514

ΤI Thermal-transfer recording material and recording method by chelation

IN Kato, Katsunori; Tanaka, Tatsuo; Komamura, Tawara

Konishiroku Photo Ind, Japan PA

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

Japanese LA

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

JP 1993-106738

19930507 <--

JP 06316164 PΙ A2 19941115

os MARPAT 122:174514

GI

The material contains an azo dye I [R = (substituted) alkyl, cycloalkyl; A AB = (substituted) 5- or 6-membered ring, 9- or 10-membered condensed ring] or II [R1, R2 = H, substituent; A = (substituted) 6-membered ring, condensed ring] in a transfer layer on a substrate. Images are formed by thermal chelating reaction of the azo dye with a metal ion. High-d. and stable cyan images are obtained.

Ι

ΙI

161195-94-4 161195-95-5 ΙT

RL: DEV (Device component use); RCT (Reactant); USES (Uses) (thermal-transfer recording material contg. azo chelating dye for cyan image)

161195-94-4 HCAPLUS RN

Propanedinitrile, [[2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-CN

5-nitrophenyl]methylene]- (9CI) (CA INDEX NAME)

161195-95-5 HCAPLUS

Propanedinitrile, [[2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-(trifluoromethyl)phenyl]methylene)- (9CI) (CA INDEX NAME)

ANSWER 9 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

AN 1995:237241 HCAPLUS

122:81247 DN

A short facile route to 1-hydrazinoisoquinoline: Ring closure reactions of substituted 1-hydrazinoisoquinoline derivatives and substituted 2-(4-carbethoxy)phenyl-1(2H)-isoquinolinone derivatives and their biological activity

Pinto de Souza, Eleanor; Fernandes, Peter S. ΑU

CS

NSR Lab., St. Xavier's Coll., Bombay, 400 001, India Indian J. Chem., Sect. B: Org. Chem. Incl. Med. Chem. (1994), SO 33B(12), 1150-8

CODEN: IJSBDB; ISSN: 0376-4699

DTJournal

LA English

A short facile synthesis of 1-hydrazinoisoquinoline from AB 1-chloroisoquinoline is reported. Substituted 1,2,4-triazolo[3,4alisoquinolines were prepd. from 1-hydrazino-7-methoxy-3-methylisoquinoline. The compd. underwent cyclization with acetic anhydride, benzoyl chloride, di-Et malonate, benzoin, nitrous acid, acetylacetone, Et acetoacetate and di-Et acetylenedicarboxylate. Substituted 2-[4-(4-amino-5-mercapto-1,2,4-triazol-3-yl)phenyl]-1(2H)-isoquinolinone was prepd. Furthermore, 2-[4-(s-triazolo[3,4-b][1,3,4]thiadiazol-3-yl)phenyl]-1(2H)-isoquinolinone and $2-[4-(s-triazolo{3,4-b}[1,3,4]thiadiazin-3-yl)phenyl]-1(2H)-isoquinolinone$ were prepd. All the compds. have been tested for their antibacterial activity; by the agar method all compds. were inactive at 50 .mu.g per well.

IT 160518-59-2P 160518-60-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

160518-59-2 HCAPLUS RN

Isoquinoline, 1-(3,5-dimethyl-1H-pyrazol-1-yl)-7-methoxy-3-methyl- (9CI) CN

RN160518-60-5 HCAPLUS

Pyrano[2,3-c]pyrazol-6(1H)-one, 3a,7a-dihydro-1-(7-methoxy-3-methyl-1-CN isoquinolinyl)-4-methyl- (9CI) (CA INDEX NAME)

ANSWER 10 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

1994:457449 HCAPLUS AN

DN 121:57449

Syntheses of 2,4-diaminopyrimidines and 1-aminoisoquinolines in the ΤI reactions of alkyl and benzyl ketones with cyanamide and N, N-dimethylcyanamide

ΑU

Zielinski, Wojciech; Mazik, Monika Inst. Org. Chem. Technol., Silesian Tech. Univ., Gliwice, 44-101, Pol. Heterocycles (1994), 38(2), 375-82 CS

SO

CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English GI

 NR^2

The reaction of alkyl and benzyl ketones with cyanamide and

N,N-dimethylcyanamide in the presence of POCl3 was examd. At the first stage, chloroformamidine derivs. were formed. In the presence of TiCl4, they underwent further reactions to give derivs. of 1-aminoisoquinoline I (R2 = Ph, substituted Ph) and 2,4-diaminopyrimidine II (R1 = alkyl, Ph, substituted Ph). The effect of constitution of substrates on adequate ratios of heterocyclic compds. is discussed.

IT 155999-40-9P 155999-41-0P 155999-42-1P 155999-43-2P 155999-44-3P 155999-45-4P 155999-46-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
RN 155999-40-9 HCAPLUS

CN 1-Isoquinolinamine, N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-41-0 HCAPLUS

CN 1-Isoquinolinamine, N,N,3,6-tetramethyl- (9CI) (CA INDEX NAME)

RN 155999-42-1 HCAPLUS

CN 1-Isoquinolinamine, N,N,3,7-tetramethyl- (9CI) (CA INDEX NAME)

RN 155999-43-2 HCAPLUS

CN 1-Isoquinolinamine, 6-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-44-3 HCAPLUS

CN 1-Isoquinolinamine, 7-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-45-4 HCAPLUS

CN 1-Isoquinolinamine, 6-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

RN 155999-46-5 HCAPLUS

CN 1-Isoquinolinamine, 7-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

L30 ANSWER 11 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1994:244949 HCAPLUS

DN 120:244949

TI New syntheses of heterocycles with vinyl- and divinylcarbodiimides: pyrroles, triazoles, pyrimidines, pyrindines, isoquinolines and thiazolylisothiazoles

AU Capuano, Lilly; Hammerer, Volker; Huch, Volker

CS Fachbereich 11.2, Org. Chem., Univ. Saarlandes, Saarbruecken, D-66041, Germany

SO Liebigs Ann. Chem. (1994), (1), 23-7 CODEN: LACHDL; ISSN: 0170-2041

DT Journal

LA German

OS CASREACT 120:244949

GΙ

AB The title compds. I and R2CH:CR1N:C:NCR1:CHR2 [II, R1 = Ph, 4-ClC6H4, 2-naphthyl, 4-MeC6H4; R2 = Ph, 4-MeC6H4] react with diazomethane either by loss or by retention of the diazo nitrogen, to afford 3,4-dihydro-2-imino-2H-pyrroles or vic-triazoles, resp. The [4 + 2] addn. of benzylidenemethylamine or alicyclic enamines to II gives partially hydrogenated pyrimidine, pyrindine or isoquinoline. Thermolysis of II proceeds with spontaneous dehydrogenation, giving high yields of 1-(1-indolyl)isoquinolines. The pyrrole III, when melted with sulfur, undergoes both dehydrogenation and sulfur insertion, whereby the hitherto unknown thiazolylisothiazole IV is formed. Its structure has been elucidated by an x-ray diffraction anal. A synthesis of

2,3,5-triphenylimidazo[2,1-a]isoquinoline is reported.

ΙT 154421-00-8P 154421-01-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 154421-00-8 HCAPLUS

Isoquinoline, 3-phenyl-1-(2-phenyl-1H-indol-1-yl)- (9CI) (CA INDEX NAME)

RN 154421-01-9 HCAPLUS

Isoquinoline, 3-(4-methylphenyl)-1-[2-(4-methylphenyl)-1H-indol-1-yl]-(9CI) (CA INDEX NAME)

L30 ANSWER 12 OF 35 HCAPLUS COPYRIGHT 2001 ACS

ΑN 1992:573507 HCAPLUS

DN 117:173507

ΤI Thermal-transfer recording materials and recording therewith

Miura, Akio; Komamura, Tawara; Nakayama, Noritaka TN

PA Konica K. K., Japan

so Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

Japanese LA

FAN

PAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI OS GI	JP 04089288 MARPAT 117:17350	A2 07	19920323	JP 1990-203739	19900731 <

The title materials providing lightfast high-d. cyan images by chelation AB with metal ions in the receptor contain a layer contg. cyan dyes I (A1-2 = electron withdrawing group; G = chelating group; Q = a group of atoms

forming 5- or 6- membered heterocyclic ring), e.g., thermally diffusible II.

108831-03-4 108831-05-6 143587-62-6 IT

RL: USES (Uses)

(dye, cyan, for thermal transfer recording inks) 108831-03-4 HCAPLUS

RN

4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

108831-05-6 HCAPLUS RN

4-Isoquinolinol, 1-[(2-hydroxy-3,5-bis(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

143587-62-6 HCAPLUS RN

Benzonitrile, 5-chloro-2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)

ANSWER 13 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

1990:611863 HCAPLUS

113:211863 DN

Preparation of 1(2H)-isoquinolones and 1-isoquinolineamines as neoplasm TΙ inhibitors

TN Behrens, Carl H.

du Pont de Nemours, E. I., and Co., USA

U.S., 13 pp. CODEN: USXXAM

DΤ Patent

LA English

FAN.CNT 1

PATENT NO. DATE APPLICATION NO. DATE РΤ IIS 4942163 19900717 US 1989-322191 19890307 <-os MARPAT 113:211863 GΙ

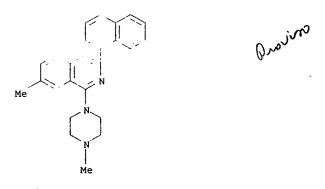
$$R^{2}$$
 R^{3}
 R^{4}
 R^{4}
 R^{1}
 R^{2}
 R^{1}
 R^{2}
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{7}
 R^{1}
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5}

The title compds. [I and II; R = 1-naphthyl; R1, R2, R4 = H, Me, C1; R3 = H, alkyl, C1, NR52, N+R53I-; R5 = H, alkyl; R6, R7 = H, alkyl, (CH2) nNR52; NR6R7 = piperazino, 4-alkylpiperazino; n = 2-8] were prepd. Thus, 5-nitro-N,N,2-trimethylbenzamide (prepn. given) was hydrogenated over Pd/C and the product stirred overnight with Zn-modified NaBH3CN in MeOH contg. HCHO to give 2,4-Me(Me2N)C6H4CONMe2 which was stirred 1 h at -78.degree. with (Me2CH)2NLi in THF followed by addn. of 1-cyanonaphthalene and stirring for 3 h to give, after acidification, I.HCl (R1 = R3 = R4 = H, R2= NMe2). The latter increased survival time of mice inoculated with L1210 murine leukemia cells by 156% over controls at 6 mg/kg/day for 9 days.

130370-12-6P 130370-14-8P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as neoplasm inhibitor)

130370-12-6 HCAPLUS RN

Isoquinoline, 7-methyl-1-(4-methyl-1-piperazinyl)-3-(1-naphthalenyl)-CN (9CI) (CA INDEX NAME)



130370-14-8 HCAPLUS RN

1,2-Ethanediamine, N,N,N'-trimethyl-N'-[7-methyl-3-(1-naphthalenyl)-1isoquinolinyl] - (9CI) (CA INDEX NAME)

```
ANSWER 14 OF 35 HCAPLUS COPYRIGHT 2001 ACS
L30
    1987:431094 HCAPLUS
```

AN

DN 107:31094

ΤI Color photographic recording material

IN Bergthaller, Peter; Schenk, Guenther; Wolfrum, Gerhard; Runzheimer, Hans Volker; Heidenreich, Holger

Agfa-Gevaert A.-G. , Fed. Rep. Ger.

so Ger. Offen., 81 pp.

CODEN: GWXXBX

рπ Patent

LA German

FAN. CNT 1

KIND	DATE	APPLICATION NO.	DATE
A1	19820916	DE 1981-3107540	19810227 <
A1	19820908	EP '1982-101076	19820213 <
B1	19840620		
FR, GB	3		•
Α	19831129	US 1982-351103	19820222 <
A2	1.9820930	JP 1982-31647	19820227 <
B4	19911028		
)	19810227		•
	A1 A1 B1 FR, GE A A2	A1 19820916 A1 19820908 B1 19840620 FR, GB A 19831129 A2 19820930 B4 19911028	A1 19820916 DE 1981-3107540 A1 19820908 EP 1982-101076 B1 19840620 FR, GB A 19831129 US 1982-351103 A2 19820930 JP 1982-31647 B4 19911028

GI For diagram(s), see printed CA Issue.

Diffusable azo dyes of the formula I (R, R1 = electroneg. substituents AB whose meta sigma value .delta.m satisfies .gtoreq.1 of the relations .sigma.m(R), .sigma.m(R1) .gtoreq. +0.33; .sigma.m(R) + .sigma.m(R1) gtoreq. +0.75; or .sigma.m(R) .gtoreq. +0.33 and R1 = SO2R3 where R3 = M, OH, NH2, NHR4 where R4 = alkyl, aryl, alkylsulfonyl, arylsulfonyl, or acyl; R2 = a chelate-forming group; A = 2-amino-3-hydroxypyridine, a 4,5-diphenylimidazole, or a 4-hydroxyisoquinoline ring) are described which are freed upon imagewise development from the corresponding dye releaser and form blue or cyan metal-dye complexes. The dyes, which are useful in color diffusion-transfer photog. materials, give esp. clear cyan color tones when complexed with Ni and Cu complexes. A polyethylene-coated paper was coated with a red-sensitized gelatin-Ag(Br,I) emulsion contg. an electron donor compd., a dye releaser of the formula II, and an oil former, a protective layer, and a hardening layer. This element was then exposed through a step wedge, combined with a receptor sheet, and then processed to give a dye image with a Dmin of 0.2, a Dmax of 1.9, a relative sensitivity of 85, and a d. loss of 15% when exposed to a Xe light (4.8 .times. 106 lx-h).

ΙT 108831-02-3

RL: RCT (Reactant)

(acetylation and chlorination of)

RN 108831-02-3 HCAPLUS

CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)

IT

108830-92-8 RL: USES (Uses)

(photog. azo dye-releasing compd.) 108830-92-8 HCAPLUS

RN

Benzenesulfonamide, N-[5-[[1-(4,5-dimethyl-3,6-dioxo-2-propyl-1,4cyclohexadien-1-yl)tetradecyl]sulfonyl]-2-methylphenyl]-4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro-(9CI) (CA INDEX NAME)

IT 108831-15-8P

RL: PREP (Preparation)

(prepn. and reaction of diazotized) 108831-15-8 HCAPLUS

RN

2-Naphthalenecarboxamide, 4-[[[3-chloro-4-hydroxy-5-[(4-hydroxy-3-methyl-1-CN isoquinolinyl)azo]phenyl]sulfonyl]amino]-1-hydroxy-N,N-dioctadecyl- (9CI) (CA INDEX NAME)

ΙT 108831-13-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, with cetyloxyphenylaminoindole) 108831-13-6 HCAPLUS

RN

Benzenesulfonyl chloride, 4-(acetyloxy)-3-([4-(acetyloxy)-3-methyl-1-CN isoquinolinyl]azo]-5-nitro- (9CI) (CA INDEX NAME)

ΙT

108831-00-1P 108831-03-4P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 108831-00-1 HCAPLUS

RN

Benzenesulfonamide, 3-chloro-4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & \\ H_2N-S & & & & \\ O & & & & \\ O & & & & \\ OH & & & & \\ \end{array}$$

RN 108831-03-4 HCAPLUS

4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

108830-94-0P 108830-95-1P RL: PREP (Preparation) ΙT

(prepn. of, as photog. diffusible azo dye-releasing compd.)

RN

(preph. of, as photog. diffusible also dye-releasing Compd.)

108830-94-0 HCAPLUS

Benzenesulfonamide, 4-(acetyloxy)-3-[[4-(acetyloxy)-3-methyl-1-isoquinolinyl]azo]-N-[2-[4-(hexadecyloxy)phenyl]-1H-indol-3-yl]-5-nitro-(9CI) (CA INDEX NAME) CN

RN 108830-95-1 HCAPLUS

2-Naphthalenecarboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-1-hydroxy-4-[[[4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitrophenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)

108830-99-5D, nickel complex 108831-00-1D, copper and nickel complexes 108831-01-2D, nickel complexes 108831-03-4D, nickel complexes 108831-04-5D, copper and nickel complexes 108831-03-4D, nickel complex 108831-05-6D, nickel complex 108859-46-7D, nickel complex RL: PRP (Properties)

(spectral properties of, color photog. applications in relation to)

108830-99-5 HCAPLUS RN

Benzenesulfonamide, 5-chloro-2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME) CN

RN 108831-00-1 HCAPLUS

Benzenesulfonamide, 3-chloro-4-hydroxy-5-{(4-hydroxy-3-methyl-1-isoquinolinyl)azo}- (9CI) (CA INDEX NAME) CN

RN 108831-01-2 HCAPLUS

Benzenesulfonic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)

108831-02-3 HCAPLUS

RN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME) CN

RN

108831-03-4 HCAPLUS
4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

RN 108831-04-5 HCAPLUS

1,3-Benzenedisulfonamide, 4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME) CN

108831-05-6 HCAPLUS
4-Isoquinolinol, 1-[{2-hydroxy-3,5-bis(trifluoromethyl)phenyl]azo}-3-methyl- (9CI) (CA INDEX NAME) RN CN

108859-46-7 HCAPLUS RN

Benzenesulfonic acid, 3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-4-[(methylsulfonyl)amino]-5-nitro- (9CI) (CA INDEX NAME)

ANSWER 15 OF 35 HCAPLUS COPYRIGHT 2001 ACS

1986:604283 HCAPLUS AN

DN 105:204283

TI Cytoplasmic vacuolation of pancreatic .beta. cells of rats after oral administration of a derivative of isoquinoline

Kast, A.; Ueberberg, H.
Dep. Exp. Pathol., Nippon Boehringer Ingelheim Co., Ltd., Yato, Japan Toxicol. Appl. Pharmacol. (1986), 85(2), 274-85
CODEN: TXAPA9; ISSN: 0041-008X CS

so

DT Journal LA English

GI

Islet of Langerhans .beta.-cells were studied in Sprague-Dawley rats dosed

PATEL 09/852,850

by gavage with 0 (control), 75, 150, 250 or 300 mg/kg/day SH 966BS (I) { 58138-24-2]. All doses caused a significant and dose-dependent increase in serum glucose (diabetes mellitus). At 250 mg/kg, degranulation of .beta.-cells was discovered after 1 day and vacuole formation after 2 days. Ultrastructural alterations compared well with that seen after treatment with cyproheptadine and other structurally related compds. The vacuolation of .beta.-cells was fully developed following 6 wk of daily treatment, when a dose-dependent elevation of blood glucose was 1st obsd. The effects were more severe in males than in females. Lesions were reversible within 6 wk except at 300 mg/kg in males.

. IT · 58138-24-2

> RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (toxicity of, to pancreas .beta.-cells, cytoplasmic vacuolation response to)

RN 58138-24-2 HCAPLUS

Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA CN INDEX NAME)

L30 ANSWER 16 OF 35 HCAPLUS COPYRIGHT 2001 ACS

1986:88467 HCAPLUS ΑN

104:88467 DN

ΤI Central nervous system active compounds. XV. 2-Arylisoxazol-5(2H)-ones

Hung, Tran V.; Janowski, Wit K.; Prager, Rolf H.

Dep. Org. Chem., Univ. Adelaide, Adelaide, 5001, Australia Aust. J. Chem. (1985), 38(6), 931-7 CS

SO CODEN: AJCHAS; ISSN: 0004-9425

DTJournal

English LA

CASREACT 104:88467 os

GI

Et 5-oxo-2,5-dihydroisoxazole-4-carboxylate was treated with a no. of chlorinated heterocycles to yield the corresponding substitution products I (R = isoquinolinyl, quinolinyl, purinyl, pyrimidinyl, pyridinyl, pyridazinyl, benzothiazolyl, quinazolinyl, triazinyl). I generally cause loss of motor control in mice, but are relatively toxic.

TΤ 100422-70-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and central nervous system activity of)

100422-70-6 HCAPLUS RN

4-Isoxazolecarboxylic acid, 2,5-dihydro-2-(3-methyl-1-isoquinolinyl)-5-oxo-CN , ethyl ester (9CI) (CA INDEX NAME)

ANSWER 17 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

AN 1985:561857 HCAPLUS

DN 103:161857

Photoisomerization and relaxation of symmetrical triazacarbocyanine dyes ΤI in an alcohol mixture

ΑU Balli, Heinz; Eichenberger, Thomas; Hellrung, Bruno; Scheibli, Peter

Inst. Farbenchem., Univ. Basel, Basel, CH-4056, Switz.
Helv. Chim. Acta (1985), 68(5), 1394-400

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

GΙ

$$R \xrightarrow[EtN]{N+} N = NN \xrightarrow[Et]{N+} N = NEt$$

Photoisomerization of I (R = H, Br, NH2, NO2) and of II (R = H and R1 = H, Me or RR1 = benzo, 1,2-naphtho; X = S, Se, CH:CH, o-C6H4) in 90:5:5 EtOH-MeOH-iso-PrOH at 110-250~K was followed by a 1st-order thermal reverse isomerization in the dark. For II (R = R1 = H, X = CH:CH) [2805-63-2] the irradn. resulted in a decrease in visible absorption intensity with no shift in .lambda.max, whereas most of the other II showed a hypsochromic shift of .lambda.max accompanied by a decrease in intensity. For II (R = R1 = H, X = o-C6H4) [3801-71-6] and 3 other II, irradn. resulted in a shift in the ratio of intensities of 2 absorption bands. With I the electron-donor substituents (OMe, NH2) increased the rate of the dark reaction and NO2 groups decreased the rate. The mechanism proposed involves cis-trans isomerization around the N:N bond, by inversion after partial rotation.

ΙT 98621-70-6

RL: USES (Uses)

(photoisomerization and subsequent thermal reversion of, kinetics and mechanism of)

98621-70-6 HCAPLUS RN

 $Is oquino linium, \ 2-ethyl-1-[3-(2-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(2-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(2-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(3-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(3-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(3-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(3-ethyl-3-methyl-1(2H)-is oquino linylidene)-1-[3-(3-ethyl-3-methy$ CN triazenyl]-3-methyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1 CRN 98621-69-3 CMF C24 H26 N5

2 CM

CRN 14874-70-5 CMF B F4 CCI CCS

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L30 ANSWER 18 OF 35 HCAPLUS COPYRIGHT 2001 ACS
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1985:87554 HCAPLUS AN

DN 102:87554

ΤI Silver halide color photographic materials

Fuji Photo Film Co., Ltd., Japan

so Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DТ Patent

Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 59154448	A2	19840903	JP 1983-28927	19830223 <
<pre>GI For diagram(s),</pre>	see pr	inted CA Issue.		

Ag halide color photog. photosensitive materials contain azo dye forming compd. I or II (A = heterocycle; B = 5-membered heterocycle; Z = bond, divalent moiety; R = group which is sepd. from the azo dye or its precursor during processing by an alk. soln.; R1, R2 = H, or a substituent which does not exhibit photog. degrdn. effects). The dyes formed from I or II form stable chelates with metals, and hence useful for forming stable images in image receptor layer. Thus, a polyester film support was coated with (1) a dye-mordanting layer contg. Ni acetate and divinylbenzene-N-methyl-N-(vinylbenzyl)piperidinium chloride-styrene copolymer, (2) a layer contg. acylamide-Na N-vinylbenzyliminodiacetate copolymer, (3) a reflector layer contg. TiO2, (4) a carbon black-contg. layer, (5) a layer contg. III, (6) a red-sensitive internal latent image type Ag halide emulsion layer, (7) a gelatin layer contg. 2,5-di-tert-pentadecylhydroquinone, and (8) an overcoat layer to give a diffusion transfer photosensitive film. The diffusion transfer photog. film gave images with azo dye-Ni chelate (having .gamma.max 650) with high

94767-38-1P

RL: PREP (Preparation)

Dmax and low Dmin.

(prepn. of, as diffusion-transfer photog. dye-releasing compd.)

RN 94767-38-1 HCAPLUS

CN

1H-Indazole-5-sulfonamide, N-[5-(1,1-dimethylethyl)-4-(hexadecyloxy)-2hydroxyphenyl]-7-{(4-hydroxy-3-methyl-1-isoquinolinyl)azo}-4-nitro- (9CI)

94737-95-8 IT

RL: RCT (Reactant)

(reaction of, with amino-tert-butylhexadecyloxyphenol hydrochloride)

RN 94737-95-8 HCAPLUS

CN 1H-Indazole-5-sulfonyl chloride, 7-[[4-(benzoyloxy)-3-methyl-1isoquinolinyl]azo]-4-nitro- (9CI) (CA INDEX NAME)

ANSWER 19 OF 35 HCAPLUS COPYRIGHT 2001 ACS

1982:615949 HCAPLUS AN

DN 97:215949

A synthesis of alkylated 3-aminoisoquinolines and related compounds тT

ΑU Liepa, Andris J.

CS Div. Appl. Org. Chem., CSIRO, Melbourne, 3001, Australia Aust. J. Chem. (1982), 35(7), 1391-403 CODEN: AJCHAS; ISSN: 0004-9425

DT Journal

LA English

N,N-Dialkyl derivs. of 3-aminoisoquinoline have been prepd. by reaction of nitriles with various arylacetic acid tertiary amides in the presence of POC13. The synthesis has been extended to include a benzoisoquinoline and annulated isoquinolines by the selection of appropriate amide and nitrile

precursors.

TT 83814-30-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

83814-30-6 HCAPLUS

1-Isoquinolinamine, 6,7-dimethoxy-N,N-dimethyl-3-(4-morpholinyl)- (9CI) CN (CA INDEX NAME)

ANSWER 20 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

AN1981:569009 HCAPLUS

DN 95:169009

Isoquinoline acetic acids and pharmaceutical compositions containing them TI

Schnur, Rodney Caughren IN

Pfizer Inc., USA PA

Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	 -			
PI EP 30861	A2	19810624	EP 1980-304517	19801215 <
EP 30861	A3	19810923		
EP 30861	B1	19830727		
R: BE, CH,	, DE, FF	R, GB, IT, LU	, NL, SE	
US 4283539	A	19810811	US 1979-104939	19791218 <
JP 56092871	A2	19810727	JP 1980-177066	19801215 <
JP 62010508	B4	19870306		
DK 8005364	Α	19810619	DK 1980-5364	19801217 <
DK 149569	В	19860728		
DK 149569	С	19870202		
PRAI US 1979-104939		19791218		
GI				

Acids and esters I, II, and III {R = H, Me; R1 = H, alkyl; R2 = (un)substituted benzyl or benzyloxy; R3 = (un)substituted benzyl; R4 = Ph, chloro-, bromo-, or fluorophenyl, (un)substituted benzyl) were prepd. and they inhibited aldose reductase. 2-Methyl-1-oxo-3-indanacetic acid was treated with BuONO, the I (R = Me, R1 = H, R2 = OH) obtained was dehydroxylated, and the product treated with 3,4-Cl2C6H3CH2Cl to give I (R = Me, R1 = H, R2 = 3,4-Cl2C6H3CH2).

IT 79456-23-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

79456-23-8 HCAPLUS

4-Isoquinolineacetic acid, 1-[[(4-chlorophenyl)methyl]methylamino]-3-CN methyl- (9CI) (CA INDEX NAME)

IT79456-22-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of and inhibitioin of aldose reductase by) 79456-22-7 HCAPLUS

RN

4-Isoquinolineacetic acid, 1-[[(4-chlorophenyl)methyl]methylamino]-3-methyl-, monohydrochloride (9CI) (CA INDEX NAME) CN

HCl

L30 ANSWER 21 OF 35 HCAPLUS COPYRIGHT 2001 ACS

ΑN 1981:174912 HCAPLUS

DN 94:174912

ΤI

Aminoisoquinoline derivatives
E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
Neth. Appl., 20 pp. PA

so CODEN: NAXXAN

DTPatent

Dutch LA

FAN.CNT 1

CAN.	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 8002119	A	19801014	NL 1980-2119	19800411 <
	ни 20959	0	19810928	HU 1979-EE2647	19790411 <
	ни 178522	P	19820528		
	GB 2048256	Α	19801210	.GB 1980-10793	19800331 <
	GB 2048256	B2	19830518		
	BE 882674	A1	19801008	BE 1980-9778	19800408 <
	AU 8057302	A1	19801016	AU 1980-57302	19800410 <

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L30 ANSWER 21 OF 35 HCAPLUS COPYRIGHT 2001 ACS
      Aminoisoquinoline derivatives
     E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
Neth. Appl., 20 pp.
PA
so
     CODEN: NAXXAN
DT
     Patent
LA
     Dutch
FAN. CNT 1
     PATENT NO.
                      KIND DATE
ΡI
                                            APPLICATION NO.
    NL 8002119
                      ----
                                                             DATE
                       Α
                            19801014
    HU 20959
                                            NL 1980-2119
                       0
    HU 178522
                            19810928
                                            HU 1979-EE2647
                                                             19800411 <--
    GB 2048256
                       P
                            19820528
                                                             19790411 <--
    GB 2048256
                       Α
                            19801210
                                           GB 1980-10793
                      B2
    BE 882674
                           19830518
                                                             1980033i <--
    AU 8057302
                      Αl
                            19801008
                                           BE 1980-9778
                      A1
                            19801016
                                                             19800408 <--
                                           AU 1980-57302
                                                            19800410 <--
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SEARCHED BY SUSAN HANLEY Phone: 305-4053

Page 34

PATEL 09/852,850

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AU 535462
                       В2
                             19840322
     FR 2453855
                       A1
                             19801107
                                             FR 1980-8052
                                                               19800410 <--
     FR 2453855
                        В1
                             19830826
     DD 150055
                        С
                             19810812
                                             DD 1980-220351
                                                               19800410 <--
     US 4324894
                                             US 1980-138843
                             19820413
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                        Α
     CH 643833
                             19840629
                                             CH 1980-2742
                                                               19800410 <--
                        Α
     JP 55149261
                                             JP 1980-46957
                       A2
                             19801120
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     DE 3013998
                       Α1
                             19801211
                                             DE 1980-3013998
                                                              19800411 <--
     ES 490506
                        A1
                             19810216
                                             ES 1980-490506
                                                               19800411 <--
     CS 216218
                       В2
                             19821029
                                             CS 1980-2538
                                                               19800411 <--
     SU 1033001
                       A3
                             19830730
                                             SU 1980-2905799
                                                              19800411 <--
     AT 8001972
                             19831015
                                             AT 1980-1972
                       Α
                                                               19800411 <--
    AT 374798
                        В
                             19840525
PRAI HU 1979-EE2647
                             19790411
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Ι

Aminoisoquinolines I (R, R1 = H, alkyl; R2 = H, alkyl, optionally substituted Ph, pyridyl, dialkylaminoalkyl; NR1R2 = heterocyclic; R3 = alkoxy, amino) were prepd. Thus I (R = Me, R1 = R2 = H, R3 = Br) was treated with morpholine to give 83% I (R = Me, R1 = R2 = H, R3 = morpholino) which had a spontaneous motility-inhibiting ED50 of 400 mg/kg orally in mice. I (R-R2 = H, R3 = morpholino) had an analgesic ED50 of 100 mg/kg orally in the HOAc writhing test in mice and a therapeutic index of 20.

TT 77454-38-7P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
RN 77454-38-7 HCAPLUS

CN Isoquinoline, 1,3-di-4-morpholinyl- (9CI) (CA INDEX NAME)

L30 ANSWER 22 OF 35 HCAPLUS COPYRIGHT 2001 ACS AN 1980:22393 HCAPLUS

DN 92:22393

TI . 1-Amino-4-phenylisoquinoline derivatives

IN Simmonds, Robin George

PA Aspro-Nicholas Ltd., Engl.

SO Brit., 16 pp. CODEN: BRXXAA

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	GB 1545767	A	19790516	GB 1975-31144	19760630 <

The prepn. is described of title compds. I (R, R1 = H, C1-12 alkyl; RNR1 = piperazinyl optionally substituted by C1-12 alkyl or hydroxyalkyl; n = 0 - 3; m = 0 - 4; R2,R3 = C1-12 alkyl optionally substituted by .gtoreq.1 AB halo, C1-12 alkoxy, halo; R4 = H, C1-12 alkyl; R5, R6 = H or C1-12 alkyl, alkylthio, alkoxy; R5R6 = bond, O, S, C1-3 alkylene optionally contg. gtoreq.1 O or S), which show antiinflammatory (esp. antirheumatic) and/or central nervous system activity. Thus, 3-dimethylamino-7,8-dihydrobenzo[1,2]cyclohepta[3.4.5-de]isoquinoline hydrogen maleate was prepd. from dibenzo[ad]suberone by sequential treatment with NaH/Me3S+ I-, BF3.Me2O/CH2Cl2, and H2NCO2Et/H2SO4 followed by heating (256.degree., 1 h), refluxing with POCl3, and Me2NH/EtOH treatment. The yields of the 6 steps were 96, 98, 100, 89, 99, and 75.6%, resp. Compns. contg. I are described.

IT 72240-39-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 72240-39-2 HCAPLUS

RN

1-Isoquinolinamine, N,N,3-trimethyl-4-phenyl- (9CI) (CA INDEX NAME) CN

ANSWER 23 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30

1979:466274 HCAPLUS AN

91:66274 DN

TI Photographic products and processes employing nondiffusible 1-arylazo-4-isoquinolinol dye-releasing compounds

Chapman, Derek D.; Friday, James A.; Elwood, James K. IN

Eastman Kodak Co., USA PA

SO

U.S., 21 pp. CODEN: USXXAM

DT Patent

English LA

FAN.	CNT I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4148642	Α	19790410	US 1978-884469	19780307 <
	US 4183754	Α	19800115	US 1978-950194	19781010 <
PRAI	US 1978-884469		19780307		
CT					

т

CONH (CH₂) 40 C₅H₁₁-tert
$$C_{5}H_{11}-tert$$

$$OH$$

$$N=N$$

$$OH$$

Photog. elements, diffusion-transfer assemblages, and processes are described which employ a novel nondiffusible compd. having a releaseable 1-arylazo-4-isoquinolinol dye moiety. The compd. contains in the ortho position of the arylazo moiety a metal chelating group, a salt thereof, or a hydrolyzable precursor thereof, and a ballasted carrier moiety which is capable of releasing the diffusable azo dye under alk. conditions. The dye is transferred imagewise to an image-receiving layer where it is contacted with metal ions to form a metal complexed azo dye transfer image of excellent stability. Thus, a single-color integral-imaging receiver element was prepd. by coating successively on a polyester film support a metalizing layer comprising gelatin (1.08 g/m2) and NiSO4.6H2O (0.58 g/m2), a receiving layer consisting of gelatin and poly(4-vinylpyridine) (each at 2.15 g/m2), a reflecting layer comprising TiO2 and gelatin in 6.25/1 ratio, an opaque layer of C in gelatin, a layer consisting of gelatin and a dispersion of I (prepd. by reaction of 3-methyl-4-isoquinolinol with diazotized 4-(3-amino-4-hydroxybenzenesulfonamido)-1- $\label{lem:hydroxy-N-[4-(2,4-di-tert-phenylphnoxybutyl]-2-naphthamide)} $$ (0.84 g/m2), a $$$ layer of red sensitized internal image emulsion, a layer of dodecylhydroquinone(1.29 g/m2) dispersed in gelatin (1.61 g/m2), and a gelatin overcoat layer. This integral element was exposed to a multicolor test object and then processed to show a d. at .lambda.max after 4 min of 1.11, a lambda.max of 637 nm, a half bandwidth of 127, and a d. change after exposure to a 5000 ft-candle light source for 2 days of $-0.03~\mathrm{vs}$ 1.41, 544, 186, and -0.18, resp., for a Ni2+ -free control.

TT 70881-90-2 RL: USES (Uses)

(azo dye-releasing compd., for color photog.)

RN 70881-90-2 HCAPLUS

CN 2-Naphthalenecarboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-1-hydroxy-4-[[[4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)

RN 70881-92-4 HCAPLUS
CN Benzoic acid, 2-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)

RN

70881-93-5 HCAPLUS
Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-CN (9CI) (CA INDEX NAME)

RN

70881-94-6 HCAPLUS
4-Isoquinolinol, 1-[[2-hydroxy-4-(methylsulfonyl)phenyl]azo]-3-methyl-(9CI) (CA INDEX NAME) CN

RN 70881-95-7 HCAPLUS

4-Isoquinolinol, 1-[[2-hydroxy-5-[(trifluoromethyl)sulfonyl]phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME) CN

RN 70881-96-8 HCAPLUS
CN Benzoic acid, 2-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI)
(CA INDEX NAME)

RN 70881-97-9 HCAPLUS CN 4-Isoquinolinol, 1-[(2-hydroxy-4-nitrophenyl)azo]-3-methyl- (9CI) (CA INDEX NAME)

RN 70882-04-1 HCAPLUS
CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]N-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)

L30 ANSWER 24 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1977:601283 HCAPLUS

DN 87:201283

TI Synthesis and antitussive activity of 3-azabicyclo[3.2.2]nonane derivatives

AU Arya, V. P.; Kaul, C. L.; Grewal, R. S.

CS Ciba-Geigy Res. Cent., Bombay, India

SO Arzneim.-Forsch. (1977), 27(9), 1648-52

CODEN: ARZNAD

DT Journal

LA English

GI

AB Mannich bases I (R = Me, H, Et, Pr; R1 = 4-FC6H4, 4-PhCH2OC6H4, 4-BrC6H4, 4-ClC6H4, 3-pyridyl, 3-indolyl, 2-thienyl), prepd. from the substituted acetophenones and propiophenones and 3-azabicyclo[3.2.2]nonane, were evaluated for antitussive activity. I (R = Me, R1 = 4-PhCH2OC6H4) (II) was as potent as codeine and dextromethorphan in its antitussive activity. II also exhibited antimorphine activity. There was no direct correlation between the antitussive effect and antimorphine activity.

IT 64686-73-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) RN 64686-73-3 HCAPLUS

CN 3-Azabicyclo[3.2.2]nonane, 3-[3-[(3-azabicyclo[3.2.2]non-3-y1)methyl]-4methyl-1-isoquinolinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

3 HC1

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ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2001 ACS
L30
AN
     1976:560167 HCAPLUS
DN
     85:160167
    Piperazinoisoquinolines
ΤI
    Thomae, Dr. Karl, G.m.b.H., Ger.
PA
so
    Fr. Demande, 22 pp.
     CODEN: FRXXBL
DT
    Patent
LA
    French
FAN.CNT 2
    PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
    FR 2268524
                       A1
                            19751121
                                            FR 1975-13095
                                                             19750425 <---
    DE 2420012
                            19751120
                                            DE 1974-2420012 19740425 <--
                       A1
     DE 2420012
                            19790517
                       B2
                       Ç3
                            19800110
     DE 2420012
     DE 2503961
                       Α1
                            19760805
                                            DE 1975-2503961 19750131 <--
     DE 2503961
                       В2
                            19790705
    DE 2503961
                       C3
                            19800228
                            19800115
                                            CH 1979-1429
                                                             19790214 <--
    CH 615180
PRAI DE 1974-2420012
                            19740425
     DE 1975-2503961
                            19750131
    CH 1975-5155
                            19750423
GΙ
```

- AB Piperazinylisoquinolines I (R = H, R1 = H, 5-Me, 5-C1, 7-C1, 5-F, 5-OMe, 5-NO2, X = S, SO; R = Ac, CHO, R1 = H, X = SO; R = Ac, CO2Et, Me, H, R1 = 5-Me, X = SO; R = H, Me, R1 = H, X = O; R = Ac, R1 = 5-NO2, X = S) were prepd. e. g. by treating 1,3-dichloroisoquinoline with the morpholine deriv. followed by treating with a piperazine deriv. I are platelet aggregation inhibitors. Thus in the test according to Morris I (R = H, R1 = 5-C1, X = SO) gave 92% inhibition at 10-4 mole/1.
- IT 60691-16-9P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and acylation of)
- RN 60691-16-9 HCAPLUS
- CN Isoquinoline, 5-nitro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

I

```
L30
     ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2001 ACS 1976:560167 HCAPLUS
DN
      85:160167
TI
      Piperazinoisoquinolines
PA
      Thomae, Dr. Karl, G.m.b.H., Ger. Fr. Demande, 22 pp.
      CODEN: FRXXBL
DT
      Patent
LA
      French
FAN.CNT 2
      PATENT NO.
                          KIND
                                 DATE
                                                   APPLICATION NO.
                                                                       DATE
PΤ
      FR 2268524
                           A1
                                 19751121
                                                   FR 1975-13095
                                                                       19750425 <--
      DE 2420012
DE 2420012
                           Αl
                                 19751120
                                                   DE 1974-2420012 19740425 <--
                           В2
                                 19790517
      DE 2420012
                           C3
                                 19800110
      DE 2503961
                           A1
                                 19760805
                                                   DE 1975-2503961 19750131 <--
      DE 2503961
DE 2503961
                           В2
                                 19790705
                           С3
                                 19800228
      CH 615180
                           Α
                                 19800115
                                                   CH 1979-1429
                                                                       19790214 <--
PRAI DE 1974-2420012
DE 1975-2503961
                                 19740425
                                 19750131
      CH 1975-5155
                                 19750423
GΙ
```

NR N Х

Piperazinylisoquinolines I (R = H, Rl = H, 5-Me, 5-Cl, 7-Cl, 5-F, 5-OMe, 5-NO2, X = S, SO; R = Ac, CHO, Rl = H, X = SO; R = Ac, CO2Et, Me, H, Rl = 5-Me, X = SO; R = H, Me, Rl = H, X = O; R = Ac, Rl = 5-NO2, X = S) were prepd. e. g. by treating 1,3-dichloroisoquinoline with the morpholine deriv. followed by treating with a piperazine deriv. I are platelet aggregation inhibitors. Thus in the test according to Morris I (R = H, Rl = 5-Cl, X = SO) gave 92% inhibition at 10-4 mole/1. AB IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and acylation of) 60691-16-9 HCAPLUS
Isoquinoline, 5-nitro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

CN

I

SEARCHED BY SUSAN HANLEY Phone: 305-4053

HCl

HCl

RN 60691-10-3 HCAPLUS
CN Isoquinoline, 5-chloro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 60691-12-5 HCAPLUS
CN Isoquinoline, 7-chloro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM :

CRN 60691-11-4 CMF C17 H21 C1 N4 S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 60691-13-6 HCAPLUS
CN Isoquinoline, 5-fluoro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)- (9CI) (CA INDEX NAME)

RN60691-15-8 HCAPLUS

Isoquinoline, 5-methoxy-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, sulfate
(2:1) (9CI) (CA INDEX NAME) CN

CM

CRN 60691-14-7 CMF C18 H24 N4 O S

CM 2

CRN 7664-93-9 CMF H2 O4 S

RN

60691-17-0 HCAPLUS
Piperazine, 1-acetyl-4-{5-nitro-1-(4-thiomorpholinyl)-3-isoquinolinyl}-(9CI) (CA INDEX NAME)

58138-22-0P 58138-25-3P 60691-09-0P ΙT

CM 1

CRN 58138-21-9 CMF C17 H22 N4 S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 58138-25-3 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 58138-24-2 CMF C17 H22 N4 O S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z Double bond geometry as shown.

RN 60691-09-0 HCAPLUS

Isoquinoline, 3-(4-methyl-1-piperazinyl)-1-(4-morpholinyl)- (9CI) (CA CN INDEX NAME)

IT60691-18-1P 60691-19-2P 60691-22-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and platelet aggregation-inhibiting activity of) 60691-18-1 HCAPLUS

· RN

CN Isoquinoline, 5-methyl-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-(9CI) (CA INDEX NAME)

RN 60691-19-2 HCAPLUS

CN $Is oquino line, \ 5-chloro-1-(1-oxido-4-thiomorpholiny l)-3-(1-piper aziny l)-1-(1-piper aziny l)-1-(1-p$ (9CI) (CA INDEX NAME)

RN 60691-22-7 HCAPLUS

CN $Is oquino line, \ 5-methoxy-1-(1-oxido-4-thiomorpholiny1)-3-(1-piperaziny1)-,\\$ monohydrochloride (9CI) (CA INDEX NAME)

● HCl

HC1

RN 58138-24-2 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)

RN 60691-08-9 HCAPLUS
CN Isoquinoline, 1-(4-morpholinyl)-3-(1-piperazinyl)-, monohydrochloride

(9CI) (CA INDEX NAME)

● HCl

RN 60691-20-5 HCAPLUS
CN Isoquinoline, 7-chloro-1-(1-oxido-4-thiomorpholiny1)-3-(1-piperaziny1)(9CI) (CA INDEX NAME)

RN 60691-21-6 HCAPLUS
CN Isoquinoline, 5-fluoro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)(9CI) (CA INDEX NAME)

RN 60691-24-9 HCAPLUS
CN Isoquinoline, 5-nitro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 60691-23-8 CMF C17 H21 N5 O3 S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 60691-25-0 HCAPLUS
CN Piperazine, 1-acetyl-4-[1-(1-oxido-4-thiomorpholinyl)-3-isoquinolinyl)(9CI) (CA INDEX NAME)

RN 60691-27-2 HCAPLUS
CN Piperazine, l-acetyl-4-[5-methyl-1-(1-oxido-4-thiomorpholinyl)-3isoquinolinyl]- (9CI) (CA INDEX NAME)

RN60691-28-3 HCAPLUS

1-Piperazinecarboxylic acid, 4-[5-methyl-1-(1-oxido-4-thiomorpholinyl)-3isoquinolinyl]-, ethyl ester (9CI) (CA INDEX NAME)

60691-29-4 HCAPLUS

Isoquinoline, 5-methyl-3-(4-methyl-1-piperazinyl)-1-(1-oxido-4-thiomorpholinyl)- (9CI) (CA INDEX NAME)

L30 ANSWER 26 OF 35 HCAPLUS COPYRIGHT 2001 ACS

1976:59571 HCAPLUS AN

84:59571 DN

ΤI Isoquinolines

Nickl, Josef; Mueller, Erich; Schroeter, Wolfgang; Haarmann, Walter Thomae, Dr. Karl, G.m.b.H., Ger. Ger. Offen., 18 pp. IN

PA

so

CODEN: GWXXBX

DT Patent

LA German

	CNT 2 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	•	
PI	DE 2420012	A1	19751120	DE 1974-2420012	19740425	<	
	DE 2420012	В2	19790517				
	DE 2420012	C3	19800110				
	AT 7501639	A	19770715	AT 1975-1639	19750304		
	NL 7504016	A	19751028	NL 1975-4016	19750404		
	ES 436317	A1	19770201	ES 1975-436317	19750404		
	FI 7501067	A	19751026	FI 1975-1067	19750409	<	
	FI 61882	В	19820630				
	FI 61882	C	19821011	DV 1075 1570	10750411	,	
	DK 7501579	A	19751026	DK 1975-1579	19750411	<	
	DK 140841	B C	19791126				
	DK 140841		19800505	HC 1075 567224	10750411	,	
	US 3975524	A D	19760817	US 1975-567234 SU 1975-2121918	19750411		
	SU 557756	_	19770505		19750411		
	DD 119047 RO 66020	C B	19760405 19790815	DD 1975-185646 RO 1975-82052	19750423 19750423		
	RO 66020	P	19800615	RO 1975-82052	19/30423	(
	CH 613965	A	19791031	CH 1975-5155	19750423	/	
	BE 828355	A1	19751031	BE 1975-155746	19750423		
	NO 7501473	A	19751024	NO 1975-1473	19750424		
	NO 142403	. В	19800505	NO 13/3/14/3	13730424		
	NO 142403	C	19800813				
	JP 50142578	A2	19751117	JP 1975-50160	19750424	<	
	JP 58004020	B4	19830124	01 19/3 30100	13730424	`	
	AU 7580511	Al	19761028	AU 1975-80511	19750424	<	
	ZA 7502649	A	19761229	ZA 1975-2649	19750424		
	GB 1466227	A	19770302	GB 1975-17085	19750424		
	HU 170231	P	19770428	HU 1975-TO1001	19750424		
	PL 93821	P	19770630	PL 1975-179891	19750424		
	IL 47155	A1	19780310	IL 1975-47155	19750424		
	SE 404926	В	19781106	SE 1975-4779	19750424		
	SE 404926	С	19790215				
	CA 1051893	A1	19790403	CA 1975-225579	19750424	<	
	FR 2268524	A1	19751121	FR 1975-13095	19750425		
	CS 193512	P	19791031	CS 1975-2918	19750425	<	
	ES 439038	A1	19770201	ES 1975-439038	19750701	<	
PRAI	DE 1974-2420012		19740425				
	DE 1974-2403961		19750131				
	DE 1975-2503961		19750131				
GI	For diagram(s),	see pr	inted CA Iss	ue.			
AB				pd. by treating 1,3-			
	with thiomorphol	ine or	its S-oxide	and piperazine. I	(n = 0) w	as also	
	oxidized to I (n	= 1)	with H2O2.	At 3 .times. $10-5$ mc	ole/l I in	hibited	
	thrombocyte aggr	egrati	on in the th	rombocyte stickiness	test by	18 and 33%	
	resp.						
ΙT	58138-24-2P						
	RL: SPN (Synthetic preparation); PREP (Preparation)						
	• •		cyte aggrega	tion inhibiting acti	vity of)		
RN	58138-24-2 HCAP						
CN		(1-oxi	do-4-thiomor	pholinyl)-3-(1-piper	azinyl)-	(9CI) (CA	
	INDEX NAME)						

CRN 58138-21-9 CMF C17 H22 N4 S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 58138-23-1 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride
(9CI) (CA INDEX NAME)

HCl

RN 58138-25-3 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholiny1)-3-(1-piperaziny1)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 58138-24-2 CMF C17 H22 N4 O S

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

58138-21-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., oxidn., and thrombocyte aggregation inhibiting activity of) 58138-21-9 HCAPLUS

RN

Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)- (9CI) (CA INDEX CN

L30 ANSWER 27 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1975:16836 HCAPLUS

DN 82:16836

Hypolipemic and hypoglycemic 1-(1-imidazolyl)isoquinolines ΤI

Lerch, Ulrich; Granzer, Ernold IN

PA Farbwerke Hoechst A.-G.

Ger. Offen., 34 pp. so

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡĪ	DE 2314985	A1	19741017	DE 1973-2314985	19730326 <
	ES 424436	A1	19761101	ES 1974-424436	19740320 <
	GB 1464289	Α	19770209	GB 1974-12861	19740322 <
	ZA 7401917	Α	19750326	ZA 1974-1917	19740325 <
	DD 114607	С	19750812	DD 1974-177438	19740325 <

PATEL 09/852,850

```
AU 7467098
                        A1
                             19750925
                                              AU 1974-67098
                                                                19740325 <--
                                              US 1974-454713
     US 3914236
                              19751021
                                                                19740325 <--
                        Α
                                              HU 1974-HO1659
     HU 168524
                        Ρ
                              19760528
                                                                19740325 <--
     AT 7402452
                        Α
                              19761015
                                              AT 1974-2452
                                                                19740325 <--
     AT 337183
                             19770610
                        В
     BE 812841
                              19740926
                                                                19740326 <--
                        A1
                                              BE 1974-142458
                             19741025
                                              FR 1974-10396
     FR 2223024
                        A1
                                                                19740326 <--
     JP 49126684
                        A2
                              19741204
                                              JP 1974-33183
                                                                19740326 <--
     US 3961062
                              19760601
                                              US 1975-562048
                                                                19750326 <--
PRAI DE 1973-2314985
                              19730326
     DE 1973-7314985
                              19730326
     US 1974-454713
                              19740325
GI
     For diagram(s), see printed CA Issue.
     Nineteen imidazolyl-isoquinolines I (R = H, Cl, Ph, or Et; R1 = H, Ph,
     cyclohexyl, Et, Bu, or C1; R2, R3, R4 = H, Ph, or Me) and (or) their
     salts, e.g. hydrochlorides, were prepd. by reaction of the corresponding 1-chloroisoquinolines with the imidazoles in the presence of NaH or KOH or
     Bu3N in, e.g., (MeOCH2)2 or DMF. I had hypolipemic and hypoglycemic
     activities in rats and rabbits.
     55150-98-6P 55151-06-9P 55151-07-0P
     55151-08-1P 55151-09-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. and hypoglycemic and hypolipemic activity of)
RN
     55150-98-6 HCAPLUS
     Isoquinoline, 4-chloro-1-(1H-imidazol-1-yl)-3-phenyl- (9CI) (CA INDEX
     NAME)
```

RN 55151-06-9 HCAPLUS
CN Isoquinoline, 3-ethyl-1-(1H-imidazol-1-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 55151-07-0 HCAPLUS
CN Isoquinoline, 4-chloro-3-ethyl-1-(1H-imidazol-1-yl)-, phosphate (9CI) (CA INDEX NAME)

CM I

CRN 55150-96-4 CMF C14 H12 C1 N3

200928-22-9 HCAPLUS RN 1,7-Naphthyridine, 8-(1-methylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) CN (CA INDEX NAME)

200928-24-1 HCAPLUS RN Glycine, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1]CN 1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)

```
ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2001 ACS
L30
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1997:498744 HCAPLUS AN

DN 127:190707

Synthesis and antitumor activity of 3-arylisoquinoline derivatives ΤI Cho, Won-Jea: Yoo, Su-Jeong; Park, Myun-Ji; Chung, Byung-Ho; Lee, ΑU

Chong-Ock

College of Pharmacy, Chonnam National University, Kwangju, 500-757, S. CS Korea

Arch. Pharmacal Res. (1997), 20(3), 264-268 CODEN: APHRDQ; ISSN: 0253-6269 Pharmaceutical Society of Korea so

PΒ DT Journal

English LA

GI

CM

CRN 7664-38-2 CMF H3 O4 P

RN

55151-08-1 HCAPLUS Isoquinoline, 1-(1H-imidazol-1-yl)-3-phenyl-, ethanedioate (9CI) (CA CN INDEX NAME)

CM

CRN .55150-97-5 CMF C18 H13 N3

CM

CRN 144-62-7 CMF C2 H2 O4

55151-09-2 HCAPLUS RN

Isoquinoline, 4-chloro-1-(1H-imidazol-1-yl)-3-phenyl-, ethanedioate (9CI) (CA INDEX NAME) CN

CM

CRN 55150-98-6 CMF C18 H12 C1 N3

CM2

CRN 144-62-7 CMF C2 H2 O4

55150-95-3P 55150-96-4P 55150-97-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hypoglycemic and hypolipemic) 55150-95-3 HCAPLUS

RN

CN Isoquinoline, 3-ethyl-1-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)

RN 55150-96-4 HCAPLUS

Isoquinoline, 4-chloro-3-ethyl-1-(1H-imidazol-1-yl)- (9CI) (CA INDEX CN NAME)

55150-97-5 HCAPLUS RN

Isoquinoline, 1-(1H-imidazol-1-yl)-3-phenyl- (9CI) (CA INDEX NAME) CN

```
ANSWER 28 OF 35 HCAPLUS COPYRIGHT 2001 ACS
L30
AN
     1972:564414 HCAPLUS
DN
     77:164414
ΤI
     Reactions of 1-chloro-3-chloromethyl-4-methylisoquinoline
ΑU
     Nair, M. D.
     Ciba Res. Cent., Bombay, India
Indian J. Chem. (1972), 10(4), 337-40
CS
     CODEN: IJOCAP
DT
     Journal
     English
LA
GI
     For diagram(s), see printed CA Issue.
     With secondary bases 1-chloro-3-(chloromethyl)-4-methylisoquinoline (I)
     gave mono or disubstitution products in which the Cl in positions 1 or 3, or both was replaced. In 1-chloro-3-[(2-methylpiperidino)-methyl]-4-
     methylisoquinoline there was NMR evidence for non-equivalence of benzylic
     methylene protons from the asymmetry of the 2-Me substituent on
     piperidine. Reaction of I with piper-azine gave a bis condensation
     product, II, with NH3 and 4-(.gamma.-aminopropyl)morpholine III and IV
     were obtained, resp. Nitra-tion of I gave the corresponding 5-NO2 deriv.,
     reaction of which with bases gave mono or disubstituted products,
     depending on reaction conditions.
     14576-16-0P 14576-17-1P 14577-67-4P
     14657-46-6P 14657-48-8P 14657-49-9P 14657-50-2P 14657-51-3P 14657-52-4P
     18716-17-1P 37978-50-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of)
     14576-16-0 HCAPLUS
CN
     1-Piperazineethanol, 4-[[1-[4-(2-hydroxyethyl)-1-piperazinyl]-4-methyl-3-
     isoquinolinyl]methyl] - (9CI) (CA INDEX NAME)
```

$$\begin{array}{c|c} Me \\ \hline \\ N \\ \hline \\ CH_2-CH_2-OH \\ \hline \\ CH_2-CH_2-OH \\ \hline \end{array}$$

RN 14576-17-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[{1-[4-(ethoxycarbonyl)-1-piperazinyl]-4methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 14577-67-4 HCAPLUS

CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)

RN 14657-46-6 HCAPLUS

CN Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 14657-48-8 HCAPLUS

CN Isoquinoline, 4-methyl-3-[(2-methyl-1-piperidinyl)methyl]-1-(4-morpholinyl)- (9CI) (CA INDEX NAME)

RN 14657-49-9 HCAPLUS

CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro-(9CI) (CA INDEX NAME)

RN 14657-50-2 HCAPLUS

CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)(9CI) (CA INDEX NAME)

RN 14657-51-3 HCAPLUS

CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)(9CI) (CA INDEX NAME)

RN 14657-52-4 HCAPLUS

CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-

(9CI) (CA INDEX NAME)

RN 18716-17-1 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 18704-39-7 CMF C19 H25 N3 O2

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 37978-50-0 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-pyrrolidinyl)-3-(1-pyrrolidinylmethyl)-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HC1

ANSWER 29 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30 AN 1971:544847 HCAPLUS DN 75:144847 Crystal structure of 5-hydroxy-3-phenyl-1-(3-methyl-1-isoquinolyl)pyrazole TΙ ΑU King, Geoffrey S. D.; Reimlinger, Hans Union Carbide Eur. Res. Assoc., Brussels, Belg. Chem. Ber. (1971), 104(9), 2694-701 CODEN: CHBEAM DΤ Journal LAGerman An x-ray crystal structure detn. of the title compd. (I) proved that I is the product of the reaction of PhC.tplbond.CCO2Me with 1-hydrazino-3-methylisoquinoline. I crystd. orthorhombic with a 43.26, b 12.626, c 5.546 .ANG., d.(exptl.) 1.32, d.(calcd.) 1.321, and space group P212121, and the asym. unit contained 2 independent mols. ΙT 34274-79-8 RL: PRP (Properties) (crystal structure of) 34274-79-8 HCAPLUS RN

Pyrazol-5-ol, 1-(3-methyl-1-isoquinolyl)-3-phenyl- (8CI) (CA INDEX NAME)

CN

ANSWER 30 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30 AN 1970:425363 HCAPLUS 73:25363 DN ŤΙ Condensed isoquinolines. I. Syntheses of s-triazolo[3,4-a]isoquinolines ΑU Reimlinger, Hans; Vandewalle, Jan J. M.; Lingier, Willy R. F. CS Union Carbide European Res. Assoc., Brussels, Belg. Chem. Ber. (1970), 103(6), 1960-81 CODEN: CHBEAM DT Journal LA German GI For diagram(s), see printed CA Issue. Hexasubstituted s-triazolo[3,4-a]isoquinolines(I) [where R = H, Me, CH2CO2Et, CH2NHBz, CH2CH2Cl, CO2Et, CF3, CH2CH2NHBz, o-ClC6H4, Et, CH2CH2CO2H, Ph, HC:CPh, CH:CHPh.HC1, 3-indolylmethyl, CH2C6H3(OMe)2-3,4, n-C17H35, CH2CONHEt, CH2CONHMe, CH2CONMe2, CH2CH2OH, CH2CO2H, CHPh2, NHPh,

cyclohexylamino, 1-pyridyl, or 4-pyridyl; R1 = H or C1; R2, R4 = H or MeO;

PATEL 09/852,850

R3 = H or NO2; and R5 = H, Cl, or OMe] were prepd. by 1 or more of several methods: (a) by reaction of 1,4-dichloroisoquinoline (II) with N2H4 and RCO2Bu, (b) treatment of 1-hydrazinoisoquinoline with RCOCl, (c) reaction of II with NH2NHCOR, or (d) treatment of 1-[2-(RCO-substituted)) hydrazino] isoquinoline with SOCl2. Reaction of 1-hydrazino-3,4-(RR1-disubstituted) isoquinolines (III) with Cl2C:X yielded disubstituted 1,2-dihydro-s-triazolo[3,4-a] isoquinolines (IV) (where R = H, Cl, or Me, R1 = H or Cl, and X = O, S, NH, or NBz).

IT 27319-97-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 27319-97-7 HCAPLUS

RN 27319-97-7 HCAPLUS
CN 3-Pyrazolin-5-one, 1-(3-methyl-1-isoquinolyl)-3-phenyl- (8CI) (CA INDEX

L30 ANSWER 31 OF 35 HCAPLUS COPYRIGHT 2001 ACS AN 1968:435972 HCAPLUS .
DN 69:35972
TI 4-Methylisoquinolines
IN Aebi, Albert; Nair, Mohan D.; Bucher, Karl PA CIBA Ltd.

SO Swiss, 6 pp.

CODEN: SWXXAS

LA German

GI For diagram(s), see printed CA Issue.

The title compds. are prepd. by treating 1-chloro-3-chloromethyl-4methylisoquinoline (I) or its substituted derivs. with secondary amines. Thus, 1.55 g. I and 5 ml. morpholine was heated overnight in a pressure vessel at 150.degree.. The cryst. suspension was then evapd. to dryness, taken up in CHCl3, extd. 2 times with dil. aq. HCl, and the aq. exts. adjusted to pH 8-9 with NaOH. The oil which sepd. gradually crystd., and was sepd. and recrystd. from iso-PrOH to give II (R = H and R1 = morpholino), m. 100.degree.; dihydrochloride m. 229-32.degree. (decompn.) and maleate m. 173-5.degree.. Other II similarly prepd. are shown in the table. The starting material for II (R = NO2) was prepd. by treating I with concd. H2SO4 and fuming HNO3 to give II (R = NO2, R1 = C1), m. 104-5.degree.. A mixt. of 4 g. 1,7-dichloro-3-chloromethyl-4methylisoquinoline (IV) and 50 ml. morpholine was refluxed 4 hrs., and excess morpholine was then removed under reduced pressure. {TABLE OMITTED] The residue was treated with aq. Na2CO3 until alk. and extd. with CHCl3. The exts. were evapd. to give 7-chloro-4-methyl-1-morpholino-3-(morpholinomethyl)isoquinoline, which was purified by conversion to its maleate and then to the free base, m. 120.degree. (EtOH). IV was prepd. by treating 4,4-dimethylhomophthalimide with fuming HNO3 and concd. H2SO4 at -10.degree. to give 4,4-dimethyl-7-nitrohomophthalimide, m. 209-11.degree. Hydrogenation over Pd-C gave the 7-amino compd., m. 176-9.degree., which was diazotized and treated with CuCl to give the 7-chloro deriv., m. 200.degree.. Treatment with POC13 gave IV, m. 135.degree.. These compds. are used in pharmaceutical applications. 14576-16-0P 14576-17-1P 14577-67-4P

Me
$$CH_2$$
 N
 CH_2
 CH_2

RN 14576-17-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[1-[4-(ethoxycarbonyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 14577-67-4 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ \hline \\ N \\ \hline \\ N \\ Me \\ \end{array}$$

RN 14657-46-6 HCAPLUS CN Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) - -(CA INDEX NAME) - - -

RN 14657-49-9 HCAPLUS

CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro-(9CI) (CA INDEX NAME)

RN 14657-50-2 HCAPLUS

CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)-(9CI) (CA INDEX NAME)

RN 14657-51-3 HCAPLUS

CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)(9CI) (CA INDEX NAME)

RN 14657-52-4 HCAPLUS

- CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-(9CI) (CA INDEX NAME)

- RN 14825-52-6 HCAPLUS
- 1-Piperazineethanol, 4,4'-{methylene(4-methyl-3,1-isoquinolinediyl)}di-, CN hydrochloride (8CI) (CA INDEX NAME)

Me
$$CH_2$$
 N
 CH_2
 CH_2

- ●x HCl
- RN 18704-39-7 HCAPLUS
- CN Isoquinoline, 4-methyl-1-morpholino-3-(morpholinomethyl)- (8CI) (CA INDEX NAME)

$$\bigcap_{N}^{Me} CH_2 - N \bigcap_{O}$$

- 18704-40-0 HCAPLUS RN
- Isoquinoline, 4-methyl-1-morpholino-3-(morpholinomethyl)-, dihydrochloride (8CI) (CA INDEX NAME) CN

●2 HC1

RN 18704-43-3 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]-, monohydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ \hline \\ N \\ \hline \\ N \\ Me \\ \end{array}$$

● HCl

RN 18716-17-1 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinyl)methyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

.CRN 18704-39-7 CMF C19 H25 N3 O2

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2: Z - - -

Double bond geometry as shown.

ANSWER 32 OF 35 HCAPLUS COPYRIGHT 2001 ACS L30 1968:418996 HCAPLUS ΑN DN 69:18996 3-Chloroisocarbostyril and its chlorination products ΤI ΑU Nair, M. D.; Mehta, S. R. CS CIBA Res. Centre, Goregaon, India Indian J. Chem. (1967), 5(10), 467-70 CODEN: IJOCAP DT Journal English LA GI For diagram(s), see printed CA Issue. A mixt. of 10 g. dried homophthalimide (I) and 24 ml. POC13 was refluxed 14 hrs. (anhyd. conditions) at 170.degree., the soln. cooled and EtOH added to yield 8 g. 3-chlorocarbostyril (II), m. 219-20.degree. (EtOH). Methylation of I with MeI and alc. KOH soln. yielded 2-methyl-3-chloroisocarbostyril (III), m. 109-10.degree. (EtOH). III was also prepd. by heating 1 hr. 15 g. N-methylhomophthalimide, 30 ml. POC13, and 1 ml. H2O at 170.degree. (oil-bath) and working up of the reaction mixt. mixt. of 60 g. homophthalic acid and 100 ml. iso-PrNH2 and 20 ml. H2O was evapd. to dryness in vacuo, the residue mixed with 150 ml. o-Cl2C6H4 and heated overnight at 170.degree. to yield 52 g. N-isopropylhomophthalimide (IV), m. 88-9.degree. (EtOH). A mixt. of 8 g. IV, 24 ml. POC13, and 1 ml. concd. HCl was heated 1 hr. at 170.degree. to yield 4 g. 1,3-dichloroisoquinoline, m. 121-2.degree. II was treated with a no. of amines to give 3-aminoisocarbostyrils (V). Thus, II was mixed with approx. 5 times its wt. of secondary amine, and the mixt. heated 8 hrs. at 150.degree. in a bomb tube to yield the following V (R = H) (R1, % yield, and m.p. given): morpholino, 39, 212.degree. (CHC13-petroleum ether); pyrrolidino, 58, 238-41.degree. (decompn.); piperidino, 51.5, 195-7.degree. (CHCl3-petroleum ether); N-methylpiperazino, 47, 212.degree.; hexamethylenimino, 59.5, 177-9.degree.; N-carbethoxypiperazino, 44.7, 196-7.degree.; 4-methylpiperidino, 55.7, 230-2.degree.; tetrahydroisoquinolino, 54.5, 217-18.degree.; N-(.beta.-hydroxyethyl)-piperazino (Va), 37.5, 205-7.degree.. was 19.8% V (R = Me, R1 = morpholino), m. 131-2.degree.. A mixt. of 2 g. 3-[N4-(.beta.-hydroxyethyl)piperazino]isocarbostyril (Va) and 10 ml. POC13 was refluxed 3 hrs. to yield 2.4 g. 1-chloro-3-(N4-(.beta.-chloroethyl)-piperazino)isoquinoline (VI) HCl salt, m. 300.degree. (EtOH-ether). VI (3.2 g.) on refluxing 18 hrs. with 15 ml. morpholine yielded 1-morpholino-3-[N4-(.beta.-morpholinoethyl)piperazinol]isoquinoline, m. 145-6.degree. (dil. EtOH). A mixt. of 12 g. I, 90 ml. Ac2O and 90 ml. HC(OEt)3 was refluxed 7 hrs. and the soln. cooled to yield 13 g. .alpha.-ethoxymethylenehomophthalimide (VII), m. 236-9.degree. (dil. MeOH). Hydrogenation of 5 g. VII in 200 ml. EtOH in the presence of 0.2 g. platinum oxide at atm. pressure yielded 3.4 g. .alpha.-methylhomophthalimide, m. 140-2.degree. (dil. EtOH). H2O2 (1 ml., 30%) was added to a soln. of 1.5 g. III in 6 ml. HOAc, after the exothermic reaction had subsided, 1 ml. concd. HCl added dropwise, the mixt. kept 1 hr. and treated with ice water to yield 1.5 g. 2-methyl-3,4-dichlorohomophthalimide (VIII), m. 137-8.degree. (EtOH). The structure of VIII was confirmed by N.M.R. spectra. A mixt. of 3 g. 3-chloro-N-methyl-homophthalimide (IX), 30 ml. dioxane and 8.4 ml. concd. HCl was heated at 85.degree. (oil-bath), treated dropwise with 9 ml. H2O2, and cooled to yield 3.7 g. .alpha.,.alpha.-dichloro-N-methylhomophthalimide, m. 149-51.degree. (dil. EtOH). Use of 1 g. 3,4-dichloro-N-methylisocarbostyril in place of IX as above yielded 1 q. .alpha.,.alpha.-dichloro-N-methylhomophthalimide, m. 149-50.degree..

Similarly, chlorination of 10 g. I yielded 13.6 g. .alpha., alpha.dichlorohomophthalimide (X), m. 164-8.degree. (dil. EtOH). The reaction

of X with substituted anilines (1 hr. reflux)-yielded the corresponding phthalonimide anils (XI). The following XI were prepd. (R, Rl, m.p., and yield given): H, 4-diethylaminophenyl, 195-6.degree. (C6H6-hexane), 64.3; H, 4-methoxyphenyl, 204-7.degree. (C6H6-hexane), 89.3; H, 4-chlorophenyl, 267-9.degree. (C6H6-hexane), 91.2; Me, NH2, 160-2.degree. (HOAc-H2O), 94.0; Me, NHPh, 176-7.degree. (EtOH-H2O), 71.5. X and XI reacted with o-phenylenediamine (45 hrs. reflux in C6H6) to yield, resp., quinoxalinoisocarbostyrils (XIIa), m. 265.degree. (HOAc) and XIIb, 203-5.degree. (HOAc). Secondary bases like morpholine reacted with X to give iminium salts (XIII), which were very hygroscopic and on catalytic hydrogenation led to hydrogenolytic cleavage to yield homophthalimides, while redn. with NaBH4 gave rise to water-sol. compds., from which no definite product could be isolated.

RN 18630-91-6 HCAPLUS

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

L30 ANSWER 33 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1968:410341 HCAPLUS

DN 69:10341

TI Synthesis of biologically interesting isoquinolines

AU Nair, Mohann D.

CS Ciba Res. Centre, Bombay, India

SO Symp. Syn. Heterocycl. Compounds Physiol. Interest, Hyderabad, India, 1964 (1966), Meeting Date 1964, 107-13 CODEN: 16VOA6

DT Conference

LA English

GI For diagram(s), see printed CA Issue.

The Gabriel rearrangement of 4,4-dimethylhomophthalimide with POC13 gave as the major product 1-chloro-3-chloromethyl-4-methylisoquinoline (I), and as byproducts, 1-chloro-3-methyl-4-chloromethylisoquinoline, of I gave a 5-nitro deriv., which readily reacted with primary and secondary amines. An optimum yield of 62% in the rearrangement was obtained by adding a small amt. of water to the reaction mixt. prior to heating to 200.degree.. Rearrangement of the corresponding 4,4-diethyland 4,4-dipropylhomophthalimides gave 1-chloro-3-(.beta.-chloroethyl)-4ethylisoquinoline and 1-chloro-3-(2-chloropropyl)-4-propylisoquinoline, resp. 4-Alkyl-4-benzylhomophthalimides were prepd. by hydrogenating 4-benzylidenehomophthalimide over PtO2, and then treating with an alkyl iodide. The 4-Me, 4-Et, and 4-Pr derivs. obtained were treated with POC13, giving C-debenzylation in all cases. The 4-Me compd. gave 1,3-dichloro-4-methylisoquinoline, while the 4-Et and 4-Pr derivs. gave isocarbostyril derivs. Some of the compds. showed borderline biol. activities. The most active was 4-methyl-1-morpholino-3-(morpholinomethyl)-isoquinoline, which showed high antitussive activity and was well tolerated.

IT 15896-93-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
RN 15896-93-2 HCAPLUS

CN 1,3(2H,4H)-Isoquinolinedione, 2-(3,4-dimethyl-1-isoquinolyl)-4,4-dimethyl-

_ (8CI) - (CA INDEX NAME)

L30 ANSWER 34 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1967:482075 HCAPLUS

DN 67:82075

TI Isoquinolines. I. Rearrangement of .alpha.,.alpha.-dialkyl-homophthalimides to 1-chloro-3,4-dialkylisoquinoline derivatives

AU Marquardt, Fritz H.; Nair, Mohann D.

CS CIBA, Goregaon, India

SO Helv. Chim. Acta (1967), 50(6), 1469-76

CODEN: HCACAV

DT Journal

LA German

GI For diagram(s), see printed CA Issue.

AB On reinvestigation of the reaction of wet POCl3 with .alpha., alpha. dimethylhomophthalimide, 1-chloro-3-chloromethyl-4-methylisoquinoline (I) and 1-chloromethyl-3-methylisoquinoline were isolated as the main products (aside from some substances resulting from a redox disproportionation). The production of these two substances can be rationalized by assuming a mechanism in which the rarrangement product is a protonated deriv. of 3,4-dimethylene-3,4-dihydroisoquinoline. With .alpha., .alpha. diethylhomophthalimide, the only isolated product was a deriv. of 1-chloro-3,4-diethylisoquinoline, with a Cl atom in .beta.-position to one of the Et groups, while with .alpha.-methyl-.alpha.-benzylhomophthalimide, the isolated product was 1,3-dichloro-4-methylisoquinoline, i.e. elimination occurred instead of rearrangement. Also these results are in agreement with the proposed mechanism.

IT 15896-93-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) RN 15896-93-2 HCAPLUS

CN 1,3(2H,4H)-Isoquinolinedione, 2-(3,4-dimethyl-1-isoquinolyl)-4,4-dimethyl-(8CI) (CA INDEX NAME)

L30 ANSWER 35 OF 35 HCAPLUS COPYRIGHT 2001 ACS AN 1967:421848 HCAPLUS

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67:21848
DN
ТΙ
     New antitussive isoquinoline derivatives
     CIBA Ltd.
so
     Fr. M., 10 pp.
     CODEN: FMXXAJ
DТ
     Patent
LA
     French
FAN.CNT 1
     PATENT NO.
                          KIND DATE
                                                  APPLICATION NO. DATE
PΤ
     FR 3782
                                 19660131
PRAI CH
                                19630121
                                 19640121
GΙ
     For diagram(s), see printed CA Issue.
     New antitussive isoquinoline derivs. with general formula (I) are prepd.
     A mixt. of 9 g. 1-chloro-3-chloromethyl-4-methylisoquinoline (II) and 40
     cc. piperidine (III) is heated in a sealed tube 8 hrs. at 150.degree., the
     reaction mixt. concd. in vacuo, treated with water, and extd. with CH2Cl2,
     the ext. dried and evapd. to dryness, and the residue in CHC13 passed
     through activated alumina to give 4-methyl-1-piperidino-3-
     piperidinomethylisoquinoline, m. 111.degree. (water-EtOH). The following
     products are prepd. in a similar way (starting materials, reaction time,
     reaction temp., final product, m.p., derivs., and m.p. given): II (9 g.), pyrrolidine (40 cc.), 8 hrs., 150.degree., 4-methyl-1-(1-pyrrolidinyl)-3-
      (1-pyrrolidinylmethyl)isoquinoline, -, hydrochloride, 239.degree.; II (8
     g.), N-methylpiperazine (IV) (50 cc.), 8 hrs., 150.degree., 4-methyl-1-(N'-methylpiperazino)-3-(N'-methylpiperazinomethyl)isoquinoline
       110-11.degree., hydrochloride, 238.degree.; II (8 g.),
     N-(.beta.-hydroxyethyl)piperazine (40 cc.), 8 hrs., 150.degree.,
     4-methyl-1-[N'-(.beta.-hydroxyethyl)piperazino]-3-[N'-(.beta.-
     hydroxyethyl)piperazinomethyl]isoquinoline, 112.degree., hydrochloride, 262.degree. (decompn.); II (6 g.), Et2NH (15 cc.), 8 hrs., 150.degree.,
     4-methyl-1-diethylamino-3-diethylaminomethylisoquinoline, -, dimaleate, 109-11.degree.; II (4.5 g.), ethanolamine (15 cc.), 3 hrs., 130.degree.,
     4-methyl-1-(.beta.-hydroxyethylamino)-3-(.beta.-
     hydroxyethylaminomethyl)isoquinoline, -, hydrochloride, 252-4.degree.; II
     (5 g.), N-carbethoxypiperazine (V) (20 cc.), 6 hrs., 140.degree., 4-methyl-1-(N'-carbethoxypiperazino)-3-(N'-carbethoxypiperazinomethyl)isoq
     uinoline, 90-2.degree., -, -; II (5 g.), 2-methylpiperidine (20 cc.), 6
     hrs., 140.degree., 1-chloro-4-methyl-3-(2-methylpiperidinomethyl)isoquinol
     ine (VI), 106-8.degree., -, -; VI (6 g.), morpholine (VII) (20 cc.), 14
     hrs., 170.degree., 4-methyl-1-morpholino-3-(2-
     methylpiperidinomethyl)isoquinoline, 103-4.degree., -,
     1-chloro-3-chloromethyl-4-methyl-5-nitroisoquinoline (VIII) (2 g.), VII
     (10 cc.), 2 hrs., 120.degree., 4-methyl-1-morpholino-3-morpholinomethyl-5-nitroisoquinoline (IX), 145-6.degree., -, -; VIII (2.5 g.), III (10 cc.), 2.5 hrs., 80.degree., 4-methyl-5-nitro-1-piperidino-3-
     piperidinomethylisoquinoline, 104-6.degree., -, -; VIII (2.5 g.),
     p-anisidine (4.55 g.), EtOH (80 cc.), 4 hrs., reflux, 1-p-anisidino-3-p-
     anisidinomethyl-4-methyl-5-nitroisoquinoline, 183-5.degree., -, -;
     1,7-dichloro-3-chloromethyl-4-methylisoquinoline (X) (4 g.), VII (50 cc.), 4 hrs., reflux, 7-chloro-4-methyl-1-morpholino-3-
     morpholinomethylisoquinoline, 120.degree., maleate, -; VIII (5 g.), III (8
     cc.), EtOH (75 cc.), 1 hr., reflux, 1-chloro-4-methyl-5-nitro-3-
     piperidinomethylisoquinoline, 67-79.degree., -, -; II (4.5 g.), III (15
     cc.), 2 hrs., 80.degree., 1-chloro-4-methyl-3-
     piperidinomethylisoquinoline, 79-80.degree., -, -; VIII (3.5 g.), IV (2.58
     g.), EtOH (100 cc.), 2 hrs., reflux, 1-chloro-3-(N'-
     methylpiperazinomethyl)-4-methyl-5-nitroisoquinoline, 173-5.degree., -, -;
     VIII (4 g.), V (10 cc.), EtOH (75 cc.), 1 hr., reflux,
     1-chloro-3-(N'-carbethoxypiperazinomethyl)-4-methyl-5-nitroisoquinoline,
     127-8.degree., -, -; VIII (2.71 g.), diethanolamine (4.5 g.), dioxane (50
     cc.), 3 hrs., reflux, 1-chloro-3-[bis(.beta.-hydroxyethyl)aminomethyl]-4-
     methyl-5-nitroisoquinoline, 110-12.degree., -, -; II (5.0 g.),
     4-methylpiperidine (5.5 cc.), 2 hrs., 80.degree., 1-chloro-3-(4-
     methylpiperidinomethyl)-4-methylisoquinoline, 83-5.degree., -, -; II (5.0 g.), concd. aq. NH3 (80 cc.), hydrated CuSO4 (1.0 g.), 30 hrs.,
     140.degree., bis(1-chloro-4-methyl-3-isoquinolylmethyl)amine,
     131-2.degree., -, -; II (5.0 g.), N-(.gamma.-aminopropyl)morpholine (6.5
     g.), 2 hrs., 100.degree., N,N-bis(1-chloro-4-methyl-3-isoquinolylmethyl)-N-
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PATEL 09/852,850

- (.gamma.-morpholinopropyl)amine, 110-12.degree., -, -. Some starting materials and other products are prepd. as follows: II (6 g.) is added slowly with stirring to a cooled mixt. of 15 cc. concd. H2SO4 and 15 cc. fuming HNO3 and the mixt. stirred 1.5 hrs. below 5.degree. and poured over a mixt. of ice and water to ppt. VIII, m 104-5.degree. (EtOH). A mixt. of 4 g. IX, 0.3 g. Pd-C and $150\,$ cc. 95% EtOH is hydrogenated 1.5 hrs. to give 5-amino-4-methyl-1-morpholino-3-morpholinomethylisoquinoline (XI), m. 134-5.degree. (EtOH). A soln. of 1.6 g. NaNO2 in 5 cc. water is added slowly to a cooled soln. of 8 g. XI in 6 cc. concd. HCl and 6 cc. water, the resulting soln. poured into a cooled soln. of Cu2Cl2 (prepd. from 8 g. CusO4) and then is heated at 60.degree., and the ppt. suspended in 25 cc. water, alkalinized, and extd. with CHC13 to give 5-chloro-4-methyl-1morpholino-3-morpholinomethylisoquinoline, m. 104.degree.. 4,4-Dimethylhomophthalimide (15 g.) is added slowly with stirring to a cooled (-10.degree.) mixt. of 30 cc. concd. H2SO4 and 30 cc. fuming HNO3 and the mixt. stirred 1 hr. below 20.degree. and poured over a mixt. of ice and water to ppt. 4,4-dimethyl-7-nitrohomophthalimide (XII), m. 209-11.degree. (EtOH). A mixt. of 23.4 g. XII, 0.5 g. Pd-C, and 200 cc. MeOH is hydrogenated at 50.degree./3.4 atm. .apprx.1.5 hrs. to give 4,4-dimethyl-7-aminohomophthalimide (XIII), m. 176-9.degree. (MeOH) Concd. H2SO4 (26 g.) is added slowly to a mixt. of 20 g. XIII and 90 cc. water, and cooled at 0.degree., 8.4 g. NaNO2 in 24 cc. water added slowly to it, and this mixt. is added slowly to a soln. of Cu2Cl2 (prepd. from 33.4 g. CuSO4), and the mixt. heated at 60.degree. 30 min., cooled, dild. with water, and extd. with CHCl3 to give 4,4-dimethyl-7chlorohomophthalimide (XIV), m. 200.degree. (EtOH). A mixt. of 10 g. XIV, 0.5 cc. water, and 40 cc. POCl3 is heated in a sealed tube at 200.degree. 5 hrs. to give X, m. 135.degree. (hexane-CHCl3). Some recipes for the prepn. of pharmacol. compns. are also given. 14576-16-0P 14576-17-1P 14577-67-4P 14601-03-7P 14601-04-8P 14601-07-1P 14657-46-6P 14657-48-8P 14657-49-9P 14657-50-2P 14657-51-3P 14657-52-4P 14825-52-6P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 14576-16-0 HCAPLUS

RN

1-Piperazineethanol, 4-[(1-[4-(2-hydroxyethyl)-1-piperazinyl)-4-methyl-3isoquinolinyl]methyl] - (9CI) (CA INDEX NAME)

Me
$$CH_2$$
 N
 CH_2
 CH_2

14576-17-1 HCAPLUS

RN

1-Piperazinecarboxylic acid, 4-[[1-(4-(ethoxycarbonyl)-1-piperazinyl]-4methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 14577-67-4 HCAPLUS

CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-{(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)

RN 14601-03-7 HCAPLUS

CN Isoquinoline, 4-methyl-1-(1-pyrrolidinyl)-3-(1-pyrrolidinylmethyl)-, hydrochloride (8CI) (CA INDEX NAME)

●x HCl

RN 14601-04-8 HCAPLUS

CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]-, hydrochloride (8CI) (CA INDEX NAME)

●x HCl

14601-07-1 HCAPLUS RN

Isoquinoline, 7-chloro-4-methyl-1-morpholino-3-(morpholinomethyl)-, maleate (8CI) (CA INDEX NAME)

CM

CRN 47438-17-5

CMF C19 H24 C1 N3 O2

$$C1$$
 N
 CH_2
 N
 O

2 . CM

CRN 110-16-7 CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.

RN

14657-46-6 HCAPLUS
Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI)
(CA INDEX NAME) CN

RN 14657-48-8 HCAPLUS
CN Isoquinoline, 4-methyl-3-[(2-methyl-1-piperidinyl)methyl]-1-(4-morpholinyl)- (9CI) (CA INDEX NAME)

RN 14657-49-9 HCAPLUS CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro-(9CI) (CA INDEX NAME)

RN 14657-50-2 HCAPLUS CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)-(9CI) (CA INDEX NAME)

RN 14657-51-3 HCAPLUS CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-(9CI) (CA INDEX NAME)

RN 14657-52-4 HCAPLUS
CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinyl)methyl)(9CI) (CA INDEX NAME)

RN ,14825-52-6 HCAPLUS
CN '1-Piperazineethanol, 4,4'-{methylene(4-methyl-3,1-isoquinolinediyl)}di-,
hydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \\ \hline & \text{CH}_2 - \text{N} \\ \hline & \text{N} \\ \hline & \text{CH}_2 - \text{CH}_2 - \text{OH} \\ \\ \hline & \text{CH}_2 - \text{CH}_2 - \text{OH} \\ \end{array}$$

•x HCl